

FAIRFAX COUNTY, VIRGINIA

Environmental Improvement Program (EIP) Section E: Fact Sheets

Fiscal Year 2007

**Staff Draft
Prepared September, 2005**

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EIP07-GL-A-1. Cluster Subdivision Amendments

Description of Action

The Subdivision Ordinance, Zoning Ordinance, and Public Facilities Manual were amended such that cluster subdivisions in Fairfax County are permitted by right in the R-2 District and in the R-3 and R-4 Districts for subdivisions containing more than 3.5 acres. In addition, cluster subdivisions require special exception or rezoning approval by the Board of Supervisors in the R-C, R-E and R-1 Districts and in the R-3 and R-4 Districts for subdivisions containing 2 or more acres but less than 3.5 acres with the potential to achieve bonus densities. In exchange for reduced lot sizes and minimum required yards as compared to conventional subdivisions, there is a minimum open space requirement in cluster subdivisions. Furthermore, major emphasis is placed in cluster subdivisions on the protection of existing trees and other environmentally sensitive areas.

This action was necessitated by a 2002 amendment to the Code of Virginia addressing local government authority to regulate residential cluster subdivision development.

Environmental Agenda Objectives Supported:

Growth & Land Use 1; Water Quality 5

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

DPZ

Status/Plans/Outcomes

These amendments satisfied the aforementioned 2002 amendment to the Code of Virginia. The intent of the 2002 amendment was to facilitate residential cluster development, and the County amendments should serve to do this through procedural changes (allowing cluster subdivisions by right in certain zoning districts) and density bonuses (where the process would still require special exception approval).

In conjunction with the adoption of the cluster amendments on June 7, 2004, the Board requested staff to provide a one-year and two-year report on the cluster subdivisions that have been approved pursuant to the new provisions and to provide recommendations for possible amendments that may be required to enhance the implementation and effectiveness of the new cluster provisions. Staff will provide such reports.

Resources

FY 2006 and long-term: Cost of staff time to conduct the requested monitoring activities and to prepare any necessary follow up amendments will be absorbed within the current budget; no new staff needs are anticipated. However, these actions require staff resources in both DPZ and DPWES, thereby reducing resource availability for other tasks.

EIP07-GL-A-2. PRM Zoning District

Description of Action

On January 9, 2001, the Board of Supervisors established the new Planned Residential Mixed Use (PRM) District which allows high density residential uses or a mix of high density residential uses and commercial uses in areas designated for such uses in the Comprehensive Plan. This action was pursued in order to facilitate high density residential and mixed use development in transit station areas, consistent with Comprehensive Plan policy.

Environmental Agenda Objectives Supported:

Growth & Land Use 1, 2, 3, 4, and 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

DPZ

Status/Plans/Outcomes

The PRM District was established in 2001; as of May, 2005, ten PRM Districts have been established.

In order to ensure a broader mix of uses in high density residential areas near transit station areas and in areas designated in the Comprehensive Plan as being Urban or Suburban Centers, there is a Priority 1 item on the 2005 Zoning Ordinance Amendment Work Program to consider amending the PRM District to allow mini-warehousing establishments and vehicle sale and rental establishments in the PRM District with special exception approval.

Resources

The cost of staff time to review and process PRM District applications will be absorbed within the current budget; no new staff needs are anticipated. Existing staff resources will also be applied to the consideration of the Zoning Ordinance amendment noted above; this has already been incorporated into the Zoning Ordinance Amendment Work Program.

EIP07-GL-A-3. Plan Amendments Supporting Transit-Oriented Development

Description of Action

The Comprehensive Plan has been amended in several areas to incorporate guidance supporting mixed use, transit-oriented development near existing and proposed Metrorail stations. Support for such development is a fundamental concept that has been incorporated into the Comprehensive Plan's Concept for Future Development, and these Plan Amendments have furthered the application of this concept. The Fairlee (Metro West) Plan amendment was adopted by the Board of Supervisors on December 6, 2004. This amendment provides guidance for creating a walkable community with a mix of housing types and nonresidential uses next to the Vienna Metro station. Plan Amendments for the Merrifield Suburban Center (adopted June 11, 2001) and the Dulles Corridor Transit Station Area (adopted May 2, 2001) both supported transit-oriented development near rail stations.

Environmental Agenda Objectives Supported:

Growth & Land Use 1, 2, 3, 4, and 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

DPZ

Status/Plans/Outcomes

Several Plan Amendments have been adopted, with implementation of Plan recommendations to occur through the zoning process. Additional Plan Amendments near transit station areas will be considered in the future; a notable example is the Tysons Corner Transportation and Urban Design Study, which is addressed as EIP07-GL-B-2. More general and ongoing efforts to incorporate transit-oriented development concepts into the Area Plans are supported by other ongoing EIP actions, including EIP07-GL-B-3 (Provision of Housing in Employment Centers) and EIP07-GL-B-4 (Pedestrian-Oriented Neighborhood Commerce).

A rezoning application has been submitted and accepted for the Fairlee (Metro West) project, which, if approved, will implement the Plan's guidance for creating a walkable, mixed use community next to the Vienna Metro station. Plan guidance in other transit station areas will also need to be implemented through the zoning process.

Resources

It is estimated that \$275,000 was spent for the Fairlee (Metro West) Plan Amendment, based on this activity involving about 3 SYE of primarily senior level staff involvement. The zoning application's cost is estimated at \$70,000, which assumes .75 SYE of staff time. These costs are all being absorbed by existing staff—no new positions are requested. Additional staff expenses will be incurred for any zoning reviews pursued subsequent to other Plan Amendments.

EIP07-GL-B-1. Planned Development District Zoning Ordinance Amendment

Description of Action

This action is a review of, and possible revision to, the Planned Development District standards to, among other things, place a greater emphasis on tree preservation and the efficient use of open space.

Staff has been requested to pursue this Zoning Ordinance Amendment in order to implement a recommendation of the Infill and Residential Development Study, which was endorsed by the Board of Supervisors in 2001.

Environmental Agenda Objectives Supported:

Growth & Land Use 1; Parks, Trails & Open Space 1

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Infill and Residential Development Study

Lead Agency:

DPZ

Status/Plans/Outcomes

Staff has been working on a P districts Zoning Ordinance amendment and has coordinated draft amendment proposals both internally and with the Planning Commission's Policy and Procedures Committee, the Fairfax Committee of the Engineers and Surveyors Institute, the Northern Virginia Building Industry Association and various citizen groups. It is anticipated that this amendment will be brought to the Board for authorization of public hearings during CY 2005.

If an amendment is adopted, it is anticipated that there would be a need for education and training regarding the amendment to both staff and developers through the development of informational materials and the provision of training sessions.

Resources

The cost of staff time to process the amendment through the public hearing process and to provide the necessary follow up training and educational opportunities for both staff and citizens will be absorbed within the current budget; no new staff needs are anticipated. However, these actions require DPZ staff resources, thereby reducing resource availability for other tasks.

EIP07-GL-B-2. Tysons Corner Transportation and Urban Design Study

Description of Action

The current Tysons Corner study is to evaluate transportation and urban design issues and formulate recommendations for strengthening the Plan's guidance for transit-oriented development. Other adopted major Plan amendments addressing this objective are addressed in EIP07-GL-A-3.

Environmental Agenda Objectives Supported:

Growth & Land Use 1, 2, 3, 4, and 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agencies:

DPZ and DOT

Status/Plans/Outcomes

In January, 2005, a consultant contract was executed to conduct transportation and urban design analyses. The Board has established a citizens committee to guide this study and recommend Plan language. Public hearings on a Plan amendment based on the findings of this study are anticipated in late Spring, 2006.

Resources

The funding originally provided for the current action was \$400,000, covering only consultant technical services (for transportation and urban design analyses) and not including cost of staff time and materials to be provided during the study. Staff time is estimated to be 2 to 4 SYE (or \$170,000 to \$340,000) and material cost for document preparation and other associated costs are estimated to be \$20,000 to \$40,000. The staff costs have been absorbed within DPZ's and DOT's budgets. Due to the Board appointed Coordinating Committee's identification of the need for a more extensive community outreach than originally anticipated, plus the likelihood for additional technical analyses, the funding needs will be substantially increased. An additional \$335,000 has been requested for these purposes. The total cost of the study (consultant services, staff time and materials) is, therefore, \$925,000 to \$1,115,000.

The estimated cost of future needs is an additional \$80,000; this accounts for the staff time to prepare the Plan amendment, which is assumed to be one SYE year; other resources will be applied to processing of rezoning applications. These costs will be absorbed within the DPZ budget; however, these allocations will effectively reduce resource availability for other tasks.

EIP07-GL-B-3. Provision of Housing in Employment Centers: Area Plan Amendments and Rezonings

Description of Action

The Policy Plan includes land use and transportation policies emphasizing the need to use land resources wisely and the Comprehensive Plan's Concept for Future Development emphasizes that employment and multifamily housing should be concentrated in centers, which are served by transit. Since 1990, when the Policy Plan was adopted as part of the Comprehensive Plan and when the Concept for Future Development was used to guide the development of Area Plan recommendations, numerous amendments to the Area Plans have been made to focus future growth in centers and numerous properties have been rezoned in conformance with this Plan guidance. Continued amendment of the Area Plans and subsequent rezoning actions to further implement mixed use development in employment centers can be anticipated into the future.

Environmental Agenda Objectives Supported:

Growth & Land Use 1, 2, 3, 4, and 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

DPZ

Status/Plans/Outcomes

Since the implementation of planning policy is a continual process, efforts to implement and refine the Comprehensive Plan will continue.

Resources

Staff estimates an annual cost for implementation of this action of about one half of DPZ's Planning Division budget, or \$1,100,000; these funds are the primary source for Comprehensive Plan activities and do not include the cost associated with development review and cost of other agencies involved in implementing this objective.

EIP07-GL-B-4. Pedestrian-Oriented Neighborhood Commerce: Plan Implementation

Description of Action

In the past few years, there has been an increase in high density residential developments that integrate pedestrian oriented neighborhood commerce. An example is the redevelopment of the Fairlee neighborhood adjacent to the Vienna Metro station.

Comprehensive Plan policy supports the integration of neighborhood-serving commercial uses within residential areas, and both a Zoning Ordinance amendment (see EIP07-GL-A2) and Area Plan amendments (see EIP07-GL-A3) have been adopted in recent years to support such integration of uses. This action recognizes that implementation of this Plan policy will be a continuing process.

Environmental Agenda Objectives Supported:

Growth & Land Use 2 and 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

DPZ

Status/Plans/Outcomes

Since the implementation of planning policy is a continual process, efforts to implement and refine this aspect of the Comprehensive Plan will continue.

Resources

Costs can be considered to be part of broader comprehensive planning activities that have been identified as resources needed to implement item EIP07-GL-B-3. No additional resources are needed.

EIP07-GL-B-5. Adequate Infrastructure Legislation

Description of Action

Recommend to the Board of Supervisors continuation of the position included in the 2005 Legislative Program supporting legislation to give localities authority to adopt an adequate public facilities (APF) ordinance. Such legislation: 1) should permit localities to adopt provisions in their subdivision and site plan ordinances for deferring the approval of subdivision plats or site plans when it is determined that existing schools, roads, public safety, sewer or water facilities are inadequate to support the proposed development; and 2) should not require localities to construct the necessary infrastructure within a timeframe established by the General Assembly.

Environmental Agenda Objectives Supported:

Growth & Land Use 6

Other Plans or Documents where this action appears or that it supports:

Lead Agency:

Government Relations, Office of the County Executive

Status/Plans/Outcomes

The Code of Virginia (Section 15.2-2200) encourages localities “to improve the public health, safety, convenience and welfare of its citizens and to plan for the future development of communities ...” In addition, the Code mandates localities to “adopt ordinances regulating subdivision and development of land.” Yet the Commonwealth does not provide localities the authority to defer approval of a site plan or subdivision plat pending installation of certain public facilities even when it has been determined that existing facilities are inadequate to support the development proposal. As a result, developments proceed, with the inevitable result of increased shortages in infrastructure and the need to play catch up after the fact. The public health, safety, convenience and welfare of citizens are not well-served by this situation.

Historically, Fairfax County has acknowledged a need for additional local government authority to ensure the timely provision of adequate public facilities (APF) to accommodate new development. In recent years, the County has participated with other jurisdictions in crafting such legislation and in monitoring proposals before the General Assembly. Most recently, the County has joined and worked with the Virginia Coalition of High Growth Communities, whose priorities include pursuit of APF authority, and the County included in its 2005 Legislative Program a position statement supporting APF legislation.

Given the General Assembly’s record over the past 16 years of defeating numerous bills to enable APF ordinances, the prospects of success in the near term are not anticipated to be high. One opportunity to raise the issue is in conjunction with the Senate Finance Committee’s Statewide Transportation Analysis and Recommendation Task Force (START) established in

May to develop a transportation action plan as a basis for legislative and budget proposals for the 2006 General Assembly Session. START is considering the linkage between land use and transportation. On June 6, 2005 the Board authorized the Chairman to testify before START on behalf of the Board regarding the County's experiences and techniques for managing transportation challenges and land use planning, including the issues related to adequate public facilities.

Resources

There would be no additional costs associated with this action. The cost of staff time to research and draft an APF legislative position, coordinate with legal staff and affected agencies, vet the position with the Board of Supervisors and its Legislative Committee, and advocate APF legislation during the General Assembly would be included in current operating budgets.

EIP07-GL-B-6 – Review of Federal NEPA Reports and State Environmental Impact Reports

Description of Action

Review of federal Environmental Assessments and Environmental Impact Statements (prepared pursuant to the National Environmental Policy Act [NEPA]), and review of state Environmental Impact Reports (EIRs), for water quality and other environmental considerations.

Environmental Agenda Objectives Supported:

Growth and Land Use (General)
Water Quality 2, 5, and 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

DPZ

Status/Plans/Outcomes

NEPA documents cover a broad range of actions pursued through federal funding, of which most, if not all, fall outside of the County's zoning authority. EIRs address significant land use and development proposals by state agencies. Recent NEPA and EIR documents for projects in (or affecting) Fairfax County have included several development projects at Washington Dulles International Airport, development projects at Fort Belvoir, changes to airspace design in the Washington, D.C. metropolitan area, major utility projects, the Woodrow Wilson Bridge replacement project, the proposed Metrorail extension to and beyond Dulles Airport, and major highway projects. County staff reviews and comments on most NEPA and EIR documents that it receives and conducts follow-up actions as appropriate. While DPZ generally takes the lead on NEPA reviews, other agencies will take the lead on such reviews as appropriate (e.g., DOT has taken the lead on the reviews of Environmental Impact Statements [EISs] for major transportation projects).

Through the provision of comments on NEPA and EIR documents, the County is able to suggest actions consistent with Comprehensive Plan goals, objectives, and policies for projects that fall outside of the County's zoning authority. In the case of EISs, the NEPA review process requires project sponsors to address all comments (even if they are not required to agree with all comments). While the County's comments are not uniformly considered and accepted by federal and state project sponsors, there have been a number of such reviews that have resulted in direct negotiations between project sponsors and County staff, and responsiveness from project sponsors, on issues of concern to the County.

Resources

NEPA and EIR reviews are conducted with existing staff, although considerable staff time is often needed for the review of complex state and federal projects. The often-substantial staff resources that are dedicated to these reviews are unavailable for other projects and priorities.

EIP07-GL-C-1. Future Planned Development District Zoning Ordinance Amendment

Description of Action

Amend the Zoning Ordinance to expand the number of uses allowed in Planned Development Districts and to revise allowed densities/intensities of uses in these districts, as appropriate, to better support Comprehensive Plan recommendations regarding mixes of uses in growth centers. This action would go beyond what is currently being considered per EIP07-GL-B-1, which focuses on tree preservation and open space considerations associated with the Infill and Residential Development Study, and EIP07-GL-A-2, which focuses on the addition of two specific uses in the PRM District.

Environmental Agenda Objectives Supported:

Growth & Land Use 1, 2, 3, 4, and 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

DPZ

Status/Plans/Outcomes

The Zoning Ordinance Amendment work program would need to be revised to incorporate this action. This item is currently not scheduled for action on the work program.

Resources

The cost of staff time to process the amendment through the public hearing process and to provide the necessary follow up training and educational opportunities for both staff and citizens will be absorbed within the current budget; no new staff needs are anticipated. However, these actions require DPZ staff resources, thereby reducing resource availability for other tasks; the addition of any new item to the Priority I Zoning Ordinance Amendment work program will necessitate the removal of one or more other items from this list.

EIP07-GL-C-2. Residential Compatibility Zoning Ordinance Amendment

Description of Actions

(1) Consider amending the Zoning Ordinance to incorporate methods, such as maximum lot coverages or floor area ratio requirements, that address compatibility issues associated with new residential development in existing residential districts. (2) In addition, consider the initiation of a Neighborhood Conservation District to address compatibility issues associated with new residential construction in developed communities.

Environmental Agenda Objectives Supported:

Growth & Land Use 6

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Infill and Residential Development Study

Lead Agency:

DPZ

Status/Plans/Outcomes

Both of these actions are contained on the Priority 2 list of the 2005 Zoning Ordinance Amendment Work Program. During the consideration of the 2006 Zoning Ordinance Amendment Work Program, these items should be considered for future prioritization. Coordination with the Office of County Attorney is needed in order to verify whether or not the establishment of Neighborhood Conservation Overlay Districts requires enabling authority from the Virginia General Assembly.

Resources

The cost of staff time to process the amendment(s) through the public hearing process and to provide the necessary follow up training and educational opportunities for both staff and citizens will be absorbed within the current budget; no new staff needs are anticipated. However, these actions require DPZ staff resources, thereby reducing resource availability for other tasks; the addition of any new item to the Priority 1 Zoning Ordinance Amendment work program will necessitate the removal of one or more other items from this list. Staff anticipates that this amendment would be complex and controversial; a considerable level of staff resource needs should be assumed.

EIP07-AQ-A-1. Air Quality Program Manager Position

Description of Action

Create and fill an Air Quality Program Manager position in the Health Department to participate in regional air quality planning efforts, collaborate with the Environmental Coordinator and other county agencies to recommend strategies for the county to implement to improve air quality, and manage the Health Department's air quality program, including ambient air monitoring.

Environmental Agenda Objectives Supported:

Air Quality and Transportation (General)

Other Plans or Documents where this action appears or that it supports:

Lead Agency:

Health Department

Status/Plans/Outcomes

This position was filled in February 2005. The Air Quality Program Manager is a member of the Environmental Coordinating Committee (ECC), attends the Council of Government's Metropolitan Washington Air Quality Committee (MWAQC) meetings, represents the county on MWAQC's Technical Advisory Committee (TAC), is a member of TAC's Control Measure Workgroup, serves as the county's Clean Air Partners Air Quality Action Day Coordinator and is a member of the Environmental Protection Agency (EPA) Region III Air Quality Committee.

Funding sources

This position is funded through the Health Department's budget.

EIP07-AQ-A-2. South County Bus Plan

Description of Action

This action involves the expansion of bus service throughout southern Fairfax County. As part of this project all the Fairfax Connector service in the southern part of Fairfax County was reviewed. Service was reconfigured to provide better serve areas that already had transit service and to expand service into new areas. The project placed particular emphasis on Richmond Highway corridor. Existing Fairfax Connector and Metrobus service was reconfigured and new service was added. Metrobus 9A service was converted to limited stop, Richmond Highway Express (REX) service. (In conjunction with the new bus service, capital improvements to bus stops, sidewalks and intersections along Richmond Highway are also being undertaken). The goals of the project are to increase transit ridership, reduce congestion and reduce air pollution.

Environmental Agenda Objectives Supported:

Air Quality and Transportation 1
Growth and Land Use 3

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Board of Supervisors' Four Year Transportation Plan

Lead Agency:

Department of Transportation

Status/Plans/Outcomes

This new service was implemented on September 26, 2004. Additional service was implemented on October 24, 2004, to address overcrowding on some routes. Since implementation, bus ridership on Richmond Highway has increased 21 percent. The Department of Transportation will continue to monitor the service in this corridor and propose adjustments, as necessary.

In addition, the Department of Public Works and Environmental Services is proceeding with significant pedestrian and bus stop improvements in the corridor.

Resources

The Board of Supervisors approved a combination of general funds, state aid and state grants to provide this service. The total cost of the increased bus service in FY 2005 was \$4.1 million.

EIP07-AQ-A-3. School Bus Exhaust Retrofit

Description of Action

Retrofit all school buses having at least three years remaining life with emissions reducing treatments.

Environmental Agenda Objectives Supported:

Air Quality and Transportation (General)

Other Plans or Documents where this action appears or that it supports:

Air Quality Management Plan

Lead Agency:

DVS

Status/Plans/Outcomes

All eligible buses received retrofits between July 2004 and February 2005. AmTran RE buses of model years 1999-2003 with T444E engines received a reprogramming of the engine control module along with a diesel oxidation catalyst, reducing NO_x emissions by 25 percent and PM emissions by 10 percent. Another 576 buses of various makes and model years received diesel oxidation catalysts, reducing HC emissions by 50 percent and PM emissions by 20 percent.

Resources

Part of the funding for the AmTran retrofits (\$1,020,000) came by grant through a settlement between the US EPA and Virginia Power. The remaining funds for the AmTrans (\$266,771) and for all the other buses (\$487,445) were approved by the Board of Supervisors as part of the *FY 2003 Carryover Review*.

EIP07-AQ-B-1. EZ Bus

Description of Action

EZ Bus is a free shuttle bus service that was launched in December 2003 as part of the Virginia Governor's Congestion Relief Initiative. EZ Bus serves the Burke Centre Virginia Railway Express (VRE) Station as an alternative form of transportation to the station and relieves some of the over-crowding in the local streets and the station's parking lot.

EZ Bus operates two neighborhood routes – one north of the station, and one south of the station. Passengers subscribe in advance via the web or telephone; passengers without subscriptions are accepted on a "space available" basis. The bus arrives five minutes before the morning train departs and leaves the Burke Station five minutes after the evening train arrives. Subscribers are given an incentive card and after 15 days of riding the shuttle, they receive a 20 percent rebate on their monthly or ten-trip train ticket.

The EZ Bus shuttle service increases the number of options residents of Burke may take to get to work, which in turn reduces the amount of single occupant vehicles on the road. Based on calculations used to determine air quality benefits for federal Congestion Mitigation and Air Quality grant applications, approximately 182 vehicle trips have been eliminated per day, and 5,915 vehicle miles traveled (VMT) reduction has occurred as a result of this service.

On February 16, 2005, the U.S. Environmental Protection Agency (EPA) informed the County that EZ Bus was selected for a Clean Air Excellence Award in the Transportation Efficiency Innovations category. From over 100 applications received nationwide, EZ Bus was chosen by EPA's office of Air and Radiation for its impact, innovation, and replicability, in efforts to achieve cleaner air.

Environmental Agenda Objectives Supported:

Air Quality & Transportation 1; Growth & Land Use 3

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Fairfax County Capital Improvement Program

Lead Agency:

Fairfax County Department of Transportation

Status/Plans/Outcomes

EZ Bus initiated service on December 1, 2003. The grant funds used to implement this service have since expired. However, with the service being very successful, the Board of Supervisors has continued to fund the operations of this service.

With the Burke Centre VRE Station continuing to experience overcrowding, even with EZ Bus operating, the station parking lot has been proposed to be expanded. Currently, a 1,350 parking space garage is under design. When construction begins on this facility in 2006, there will be an increased demand for the EZ Bus service to shuttle VRE patrons from satellite parking lots to access the Burke Centre Station.

The ultimate goal is to mitigate traffic congestion and improve air quality. By increasing the EZ Bus system and ridership, positive measurable air quality benefits will result.

Resources

The EZ Bus service is operated by the Fairfax Connector and therefore is a part of its annual operating budget. The annual operating costs for EZ Bus for three buses are approximately \$396,000. These are operating costs only and any capital improvements to the system, including buses, will require separate requests and appropriations.

EIP07-AQ-B-2 Employer Services Program

Description of Action

The Employer Services Program is one component of the regional Transportation Emission Reduction Measures, which were adopted by the Metropolitan-Washington Regional Transportation Planning Board. Fairfax County has received \$170,000 in regional Commuter Connections Program funds to continue the program. The Employer Services Program provides local outreach and promotion of transportation demand management strategies to employers in Fairfax County. Employer participation is strictly voluntary and direct "sales" contact with employers is conducted by the Employer Services staff.

The program supports commute alternatives, such as public transportation, carpooling, vanpooling, teleworking, flexible work schedules, bicycling, and walking are marketed to employers. In addition, subsidies (Metrochek), incentives and the regional Guaranteed Ride Home Program are promoted. Presentations of commute alternatives are done via personal meetings with decision-makers, car/vanpool formation meetings, and/or through on-site transportation fairs.

Environmental Agenda Objectives Supported:

Air Quality and Transportation 1 and 2
Growth & Land Use 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Washington Region Transportation Improvement Program

Lead Agency:

Department of Transportation

Status/Plans/Outcomes

This program was initiated in 1997 to assist employers within Fairfax County to establish on-site Employee Transportation Projects to reduce single occupancy vehicle (SOV) travel and resultant air pollution. The program is one component of the regional Transportation Emissions Reduction Measures, which were adopted by the Metropolitan-Washington Regional Transportation Planning Board.

Resources

Annual Costs: This program is funded with \$170,000 Commuter Connections Program Grant and supported by DOT Staff.

EIP07-AQ-B-3. Ridesources Program

Description of Action

The RIDESOURCES Marketing and Ridesharing Program have received State grant support every year since 1984.

This grant program provides funding to promote the use of HOV lanes and FAIRFAX CONNECTOR express and local bus service; to promote commuter alternatives in the greater Springfield area, including discounted bus-to-rail passes, carpooling, vanpooling, and the use of Metrorail and Metrobus; to promote bus fare changes associated with the bus fare buydown program; and to promote cooperative events/marketing campaigns with other jurisdictions and the Washington Metropolitan Area Transit Authority (WMATA). In addition, funds are used to: provide technical support to Transportation Management Associations (TMAs); promote specific marketing campaigns in targeted areas; support desktop publishing and production of various marketing materials, such as maps, timetables, brochures, flyers, and posters; support the County's participation in the Metropolitan Washington Council of Governments' COMMUTER CONNECTIONS network; and provide ridematching assistance to commuters Countywide. The RIDESOURCES Program provides free ridematching services to County residents and to employees who work at employment sites within the County.

Environmental Agenda Objectives Supported:

Air Quality and Transportation 1 and 2
Growth & Land Use 7.

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Department of Transportation

Status/Plans/Outcomes:

The RIDESOURCES Marketing and Ridesharing Program continue to market ridesharing and transit marketing activities. In addition to promotion of specific marketing campaigns the program provides free ridematching services to County residents and to employees who work at employment sites within the County.

This program will continue at its current level, funded annually through a Virginia Department of Rail and Public Transportation (VDRPT) Grant, local matching funds and supported by DOT Staff

Resources

This program is supported with an annual \$280,000.00 VDRPT Grant and \$70,000 local matching funds to support existing positions of a Transportation Planner III, Graphics Artist III, and Administrative Assistant II and limited term support.

EIP07-AQ-B-4. Metrochek Program

Description of Action

Metrochek is a farecard voucher program provided as an employee benefit by more than 2,500 public and private employers in the Washington, D.C. area, including the federal government. Metrocheks are accepted by more than 100 bus, rail, and vanpool commuter services in the region, including Metro, MARC Train Service, Virginia Railway Express, and local bus systems. Metrocheks can be used as Metrorail farecards or as vouchers when purchasing fares for other transit services.

The Metrochek transit benefit works just like many other commonly available fringe benefits such as employer-provided health insurance. Employees are not taxed for the value of the Metrocheks they receive, and employers can deduct the cost of providing the program as a business expense. The monthly Metrochek benefit can be any amount the employer chooses to provide, although a maximum of \$105 per month is allowable tax-free or pre-tax to employees.

Environmental Agenda Objectives Supported:

Air Quality and Transportation 1
Growth & Land Use 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Department of Transportation

Status/Plans/Outcomes

This program is available to county employees at the Government Center Complex. The Board of Supervisors has approved funding to expand the program countywide. An employee committee is considering how expansion of the program to all county employees can be implemented, including the additional cost and logistics of managing the program County wide. They are also considering establishing a pre-tax deduction benefit for the employee for their cost above the \$60 per month allocation they receive from the county.

Resources

Annual Costs: The program is funded up to \$45,000 annually within Fairfax County Department of Transportation budget and supported by DOT Staff.

EIP07-AQ-B-5. Residential Traffic Administration Program

Description of Action

The Residential Traffic Administration Program, managed by the Fairfax County Department of Transportation, includes a Traffic Calming component which enhances pedestrian safety and mobility by providing for the installation of physical devices for slowing the speed of traffic in qualifying residential areas.

Environmental Agenda Objectives Supported:

Air Quality & Transportation #1; Growth & Land Use #7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Department of Transportation

Status/Plans/Outcomes

Pedestrian amenities are also enhanced by the Cut-through Restriction, \$200 Fine for Speeding Signs, Multi-way Stop Signs, Watch for Children Signs, and Through Truck Restriction components of the Residential Traffic Administration Program. Through FY 2004, signs, restrictions, and traffic calming projects have been implemented. This program is in place and on-going.

Resources

Fairfax County Department of Transportation staff resources to manage this program are in place, and it is anticipated that annual State funding of \$200,000 will continue.

EIP07-AQ-B-6. Transit Shelter Program

Description of Action

This program provides for transit stop amenities, such as new shelters, pads, and benches, throughout the County.

Environmental Agenda Objectives Supported:

Air Quality & Transportation #1; Growth & Land Use #7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Department of Transportation

Status/Plans/Outcomes

This program is on-going and numerous transit stop amenity improvements have been completed. The CMAQ Program has resulted in the installation of shelters through FY 2005 and continuation of the Transit Shelter Program in the future is anticipated. This program will utilize the findings of the Bus Stop Inventory and Safety Study to help address the most urgent transit stop amenities throughout the County.

Resources

Funding: Fairfax County has received \$1,425,000 in Congestion Mitigation and Air Quality Program Grants through FY 2005 and anticipates receiving an additional \$ 625,000 CMAQ Grant in FY 2006. Fairfax County Department of Transportation staff resources to manage this program are in place.

EIP07-AQ-B-7. Bus Stop Inventory and Safety Study

Description of Action

This study is to identify pedestrian access improvements needed at Countywide bus stops that will help promote transit usage and enhance pedestrian mobility and safety.

Environmental Agenda Objectives Supported:

Air Quality & Transportation #1

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Department of Transportation

Status/Plans/Outcomes

This study is to be completed in 2005. Potential bus stop improvements will be recommended and prioritized.

Resources

The Board of Supervisors approved \$1,200,000 for the Bus Stop Inventory and Safety Study. Fairfax County Department of Transportation staff resources to conduct this study are in place. Additional funding will be needed to implement actual recommended improvements. The total cost to implement these recommendations will be determined when the full scope of the project is established.

EIP07-AQ-B-8. Richmond Highway Public Transportation Initiative

Description of Action

The Richmond Highway Public Transportation Initiative is primarily a capital improvements program based on the 2001 Route 1 Corridor Bus Study conducted by the Northern Virginia Transportation Commission (NVTC), and an update prepared by Fairfax County. The program is being coordinated with the South County Bus Plan. The project involves establishing several major and minor transit centers; improving bus stops; and establishing additional park-and-ride facilities; and significantly improving pedestrian safety and access to the transit facilities. These improvements will help augment the bus service currently operating in the corridor, as well as provide the facilities to establish new routes throughout the corridor and beyond. The Richmond Highway (U.S. Route 1) Corridor is one of the most heavily transit dependent areas of Fairfax County. It is also one of the most congested and economically disadvantaged. Currently, pedestrians and transit passengers have significant difficulty crossing the six through lanes and numerous turn lanes on Richmond Highway. Although there is already a substantial amount of well-used transit service in the corridor, the Route 1 Corridor Bus Study found that this service would be even better utilized, if pedestrian and transit facilities are upgraded. Ultimately, increasing transit ridership will reduce roadway congestion, promote improved economic vitality in the corridor, and improve air quality by reducing the use of single occupancy vehicles.

Environmental Agenda Objectives Supported:

Air Quality & Transportation 1, 3

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Board of Supervisors Four Year Transportation Plan

Lead Agency:

Department of Transportation

Status/Plans/Outcomes

The initial study recommended many capital improvements, ranging from small, such as pedestrian signs and signals, to large projects, such as the transit centers and park-and-ride lots that were necessary to accomplish the plans goals. The estimated total project costs for all the capital improvements for the initiative is \$55.0 million. With that as a starting point, and so many recommended projects that were identified, the project began as a design/build project, where some of the projects could be implemented immediately, while others required more planning and analysis. The initiative began implementation with its first infusion of funds in the fall of 2002. This was a \$2.0 million Federal Highway Administration/Federal Transit

Administration Congestion Mitigation and Air Quality grant. These funds were used primarily for pedestrian improvements and bus service enhancements such as bus shelters.

The continuous planning, acquisition of funds and implementation of the initiative is done by a team of staff from various county agencies and a private transportation consultant. The timeframe for completion of the initiative is by 2010.

The ultimate goal for Richmond Highway is to have a full priority bus system with supportive roadway and facilities, and at some point in the future, rail in the corridor. This goal will serve to increase transit ridership; improve pedestrian safety; improve effectiveness and efficiency of transit operations; improve air quality; and complement community development and highway initiatives in the corridor.

Resources

The Richmond Highway Public Transportation Initiative is funded by a variety of funding sources. They include, but are not limited to, state funds (such as Virginia Department of Transportation's Revenue Sharing and Enhancement funds); federal funds (including CMAQ funds, Job Access/Reverse Commute (JARC) funds, federal appropriations and Transportation Equity Act for the 21st Century Reauthorization funds); County General Fund; and County General Obligation Bonds. Since 2002, the project has received \$18.2 million from a variety of funding sources, including federal funds, state funds, County general funds, and County General Obligation Bonds.

There is a continuous effort by the initiative's planning team to seek funding from these and other sources until the entire project is funded.

EIP07-AQ-B-9. Air Quality Outreach

Description of Action

Develop and distribute air quality outreach materials on air quality. Employees and residents need to be provided information to educate them on air quality issues and provide them with voluntary actions they can take to improve the county's air quality. This important step is needed so the region can meet the Clean Air Act National Ambient Air Quality Standards.

Environmental Agenda Objectives Supported:

- Air Quality and Transportation 2
- Environmental Stewardship (General)

Other Plans or Documents where this action appears or that it supports:

- Air Quality Management Plan

Lead Agency:

Office of Public Affairs and Health Department

Status/Plans/Outcomes

The Office of Public Affairs and Health Department partnered with Clean Air Partners in 2005 starting a county media sponsorship. Clean Air Partners, a public-private partnership chartered by the Metropolitan Washington Council of Governments, will provide a comprehensive regional media campaign to build awareness of air quality issues and promote voluntary actions individuals and employers can take to reduce air pollution and improve the health and quality of life in the region. This will include radio announcements, television announcements, brochures, flyers, fact sheets, press releases and web resources. In addition, the Office of Public Affairs and the Health Department have developed additional outreach materials to be used at public gatherings such as the Fairfax Fair and placed in public locations like the libraries. To ensure that key messages reach individuals, articles will be distributed through internal County publications and external outreach, including e-mail, Web sites, cable Channel 16 and homeowners associations. Staff will continue to research and develop new outreach materials and methods of distribution to reach as many residents as possible. Staff plans to continue the media sponsorship with Clean Air Partners in future years.

Resources

The cost for 2005 actions totaled \$25,000 which included \$15,000 being used for the Clean Air Partners media sponsorship. The funding came from \$15,000 in carry-over funds approved by the Board of Supervisors at the September 13, 2004 meeting and \$10,000 in current Health Department appropriations.

EIP07-AQ-B-10. Dulles Corridor Metrorail

Description of Action

Extend Metrorail from the vicinity of West Falls Church Metrorail Station to Tysons Corner, Dulles Airport and Loudoun County. Phase I is the extension to Wiehle Avenue.

Environmental Agenda Objectives Supported:

Growth and Land Use 4, 7
Air Quality and Transportation 1, 3,

Other Plans or Documents where this action appears or that it supports:

Board of Supervisors Four-Year Transportation Plan
Comprehensive Plan
Washington Metropolitan Area Transit Authority (WMATA) Regional System
Washington Metropolitan Region Constrained Long-Range Plan (CLRP)

Lead Agency:

Department of Transportation

Status/Plans/Outcomes

- Phase I of the Dulles Rail project (Extension to Wiehle Avenue) is currently in Preliminary Engineering.
- Opening scheduled for 2011.
- Opening Year ridership to Wiehle Avenue in 2011 projected to be 62,800.
- County is working with Western land owners to secure local funding for Phase II.

Resources

- Total Capital Cost is \$3.5 billion; Phase I cost is \$1.5 billion.
- Non-federal funding for Phase I is in place through Dulles Tax District (local) and Dulles Toll Road revenues (state).
- Cost allocation for Phase I is 50% federal, 25% state and 25% local.
- Federal funding for Phase I is approved through Preliminary Engineering.

EIP07-AQ-B-11. Alternative Fuels Clean Cities Partnership

Description of Action

Maintain active membership and participation in the Metropolitan Washington Alternative Fuels Clean Cities Partnership.

Environmental Agenda Objectives Supported:

Air Quality and Transportation #6

Other Plans or Documents where this action appears or that it supports:

None

Lead Agency:

DVS

Status/Plans/Outcomes

Continue active participation in activities of the Partnership. The organization primarily maintains a channel of information among local jurisdictions regarding development and use of alternative fuel vehicles and their supporting infrastructures. Through it, we obtain early and authoritative information on industry developments. We also share first-hand experiences with those who have researched and used various alternatives.

Resources

DVS absorbs participation costs with currently authorized staff. No funding requirements are anticipated beyond local meetings and other communications. The Partnership is sponsored by the Metropolitan Washington Council of Governments.

EIP07-AQ-B-12. Telework Initiatives

Description of Action

Increase the number of Fairfax County government employees who telework to 1,000 by the end of 2005.

Environmental Agenda Objectives Supported:

Air Quality and Transportation 2

Other Plans or Documents where this action appears or that it supports:

Air Quality Management Plan

Lead Agency:

Office of the County Executive

Status/Plans/Outcomes

The Fairfax County Board of Supervisors and the County Executive have supported Telework as a work option for the county workforce since 1996 and have endorsed the Metropolitan Washington Council of Governments (COG) goal of 20% of the area's eligible workforce teleworking by 2005. In October 2001, the County recommitted its telework efforts and launched the Telework Expansion Project. The intent of the project is to increase employee participation to reach a goal of 1,000 teleworkers by the end of 2005. Today, almost every county department has teleworkers and the number of teleworkers rose from 138 in December 2001 to over 800 in May of 2005.

Resources

Funds for the Telework Expansion Project are contained the departmental budgets of the Department of Information Technology (software licenses, loaner PCs, and pagers); the Department of Human Resources (printing costs of training materials/telework sign-up forms); and the Department of Transportation (Employer Services materials).

EIP07-AQ-B-13. Purchase of Wind Power

Description of Action

The Board of Supervisors approved the purchase of 5% of the county's electricity needs from the Mountaineer Wind Farm in West Virginia in April 2005.

Environmental Agenda Objectives Supported:

Air Quality and Transportation (General); Air Quality and Transportation 4

Other Plans or Documents where this action appears or that it supports:

Air Quality Management Plan

Lead Agency:

Office of the County Executive/ Environmental Coordinator
Department of Cable Communications and Consumer Protection

Status/Plans/Outcomes

Staff worked with the Virginia Energy Purchasing Governmental Association (VEPGA) to change the by-laws to allow this purchase. It is the first wind energy initiative in Virginia. It's a two-year contract and it's joint purchase with Arlington County. The projected emission reductions are 6.3 million pounds of CO₂, 23,200 pounds of SO₂, and 11,600 pounds of NO_x.

Funding sources

Fairfax County's cost is \$82,000 per year along with the shared \$15,000 cost for negotiation expenses. Funding was approved by the Board of Supervisors in the 2004 carry-over budget.

EIP07-AQ-B-14. Participation on the Metropolitan Washington Air Quality Committee

Description of Action

The Metropolitan Washington Air Quality Committee (MWAQC) is a regional planning group created to conduct interstate air quality attainment and maintenance planning for the Metropolitan Washington region. The authority of MWAQC is derived from the certifications made by the Governors of Virginia, Maryland and the Mayor of the District of Columbia. Fairfax County currently has three Board members serving on the committee: Supervisors Bulova, Smyth, and Dana Kauffman who is the 2005 committee Chairman.

Environmental Agenda Objectives Supported:

Air Quality and Transportation 1, 2, and 4

Other Plans or Documents where this action appears or that it supports:

Air Quality Management Plan

Lead Agency:

Board of Supervisors

Status/Plans/Outcomes

Three members of the Board of Supervisors continue to participate on this committee to conduct regional air quality planning and meet the requirements of the Clean Air Act. Other county staff members attend these meeting including the Environmental Coordinator, Air Quality Program Manager and Department of Transportation staff.

Funding sources

None

EIP07-AQ-B-15. Purchase of Hybrid Drive Vehicles

Description of Action

As vehicles retire from the county and FCPS fleets, replace them with hybrid drive vehicles when the mission permits.

Environmental Agenda Objectives Supported:

Air Quality and Transportation (General)

Other Plans or Documents where this action appears or that it supports:

Air Quality Management Plan

Lead Agency:

DVS

Status/Plans/Outcomes

As vehicle replacements are planned, DVS and user agencies consider whether a commercially available hybrid drive vehicle is practical for the intended mission. At the end of FY 2005, the county had 84 hybrid-electric vehicles (55 Toyota Priuses and 29 Ford Escape Hybrids).

Resources

Through FY 2005, the county was able to fund the incremental cost of the hybrid drive vehicles through the Vehicle Replacement Fund. The county intends to continue that practice as assessments to the Fund increase for the new hybrids.

EIP07-AQ-B-16. Support for Reductions in Ozone Transport

Description of Action

Communicate by letters, testimony, and other available means with the Governor, congressional delegation and with state and federal regulatory agencies to advocate actions to reduce transport of ozone precursors and other pollution from upwind regions along the east coast and the Ohio River valley.

Environmental Agenda Objectives Supported:

Air Quality and Transportation 4

Other Plans or Documents where this action appears or that it supports:

None.

Lead Agency:

Board of Supervisors

Office of the County Executive – Environmental Coordinator

Health Department

Status/Plans/Outcomes

Ozone transport is both a local and regional issue and it is being handled through actions by the Board of Supervisors and the Metropolitan Washington Air Quality Committee through letters and other means of communication.

Resources

Continuing efforts require allocation of available staff time. No new resource requirements are anticipated.

EIP07-AQ-B-17. Reduced Vehicle Idling

Description of Action

Identify situations where avoidable idling occurs, and take steps to reduce or eliminate it.

Environmental Agenda Objectives Supported:

Air Quality and Transportation 1

Other Plans or Documents where this action appears or that it supports:

Air Quality Management Plan

Lead Agency:

Office of the County Executive – Environmental Coordinator
Health Department

Status/Plans/Outcomes

Several situations involving avoidable idling have received attention.

- Additional scales have been installed at the I-66 Solid Waste Transfer Station to reduce the time that refuse collection vehicles spend idling while waiting their turn to unload.
- Operators of tour buses that visit Mount Vernon have been sent letters explaining the three-minute limit on idling and new signs with this requirement have been posted in the bus parking area. The Health Department has completed a Memorandum of Understanding with the Police Department to help with enforcement actions against violators.
- FCPS has advised school bus drivers on procedures to minimize idling while parked at schools.
- Connector buses are being outfitted with automatic idling shut-offs so the buses will actually turn off after a set idling time.
- All county solid waste collection trucks have automatic idling shut-offs.

Resources

Installation of truck scales at I-66 is complete (\$50,000). Current funding for other actions is handled with agency budgets.

EIP07-AQ-B-18. Four Year Transportation Plan

Description of Action

On February 9, 2004, the Board of Supervisors endorsed the Chairman's Four-Year Transportation Plan. This significant transportation initiative includes a \$215 million commitment of capital funds to improve major highway and transit projects, spot capacity and safety intersection improvements, and pedestrian improvements throughout the County. Also, included in the program are development of strategies for improving signalization and intersection traffic flow, incident management, pedestrian safety and access, context engineering, expedited project delivery, and expanding telework.

Environmental Agenda Objectives Supported:

Air Quality & Transportation #1

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan.

Lead Agency:

Department of Transportation

Status/Plans/Outcomes

Many of the projects included in the plan, are in the design phase, including Burke Centre VRE Station garage, Centreville Road, Stringfellow Road and Annandale Road intersection with Hummer Road, and Rt. 29 intersection with Gallows Road. Bus Service in the Richmond Highway corridor has been restructured resulting in a 21.5 percent increase in ridership. Many projects are under way to improve Pedestrian Safety and Access including the pedestrian awareness campaign with police enforcement in high activity areas. Traffic signal improvements have been initiated including the "Flash at Night" operation, and right turn overlaps to reduce delays. These and many other scheduled road, traffic control, and pedestrian improvements continue moving forward to meet the Board's goals in their Four-Year Transportation Plan.

Resources

Funding for the capital program is a combination of \$50 million in federal Regional Surface Transportation Program (RSTP) and Congestion Management and Air Quality (CMAQ) funds anticipated to be received by the County as well as \$165 million in County General Obligation (G.O.) bonds approved by the voters on November 2, 2004. The total funding is \$215 million.

EIP07-AQ-B-19. Fairfax Connector Emissions Reduction Program

Description of Action

Fairfax Connector is using a four-point diesel Emissions Reduction Strategy involving Horsepower Reduction, Engine Idle Reduction, Ultra-Low Sulfur Diesel (ULSD) fuel, and Diesel Particulate Filters (DPF). This strategy will reduce vehicle exhaust particulate matter, carbon dioxide, and hydrocarbons.

Environmental Agenda Objectives Supported:

Air Quality and Transportation 1 (and General)

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan.

Lead Agency:

Department of Transportation

Status/Plans/Outcomes

Projections for implementation of the four components of the diesel Emissions Reduction Program are outlined as follows: Reduction of horsepower through engine reprogramming will reduce fuel consumption by 5% and all emissions by 1%. Bus engines have also been programmed to shut down automatically after minimal idle time resulting in an additional 5.25% emissions reduction. Use of ULSD will reduce particulate matter (PM) emissions up to 10 percent in buses without DPFs. Use of ULSD in buses with DPFs will reduce particulate matter up to 90%, carbon monoxide up to 75%, and hydrocarbon up to 85%.

Resources

Board of Supervisors approved \$1,480,000 for the Bus Emissions Reduction Program in the FY 2003 Carryover, and later added \$150,000 for a total of \$1,630,000.

EIP07-AQ-B-20. Fairfax County Transit Program

Description of Action

Fairfax County's transit system, as part of a multi-modal transportation system, is provided by the Fairfax Connector bus service, Metrobus, Metrorail, MetroAccess, CUE Bus, and Virginia Railway Express (VRE). The Fairfax Connector bus service operates 55 routes, providing service to the County's six Metrorail stations. Metrobus has 87 bus routes in the County providing express bus service along Richmond Highway corridor, and service to six Metrorail stations. The County also subsidizes heavy rail service, by Metrorail and commuter rail services operated by the Virginia Railway Express (VRE). In addition, the County is in the process of implementing park-and-ride lots, transit centers and bus stop and pedestrian improvements at various locations throughout the County to support the various transit carriers.

Environmental Agenda Objectives Supported:

Air Quality and Transportation 1;
Growth and Land Use 1, 3 and 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan.

Lead Agency:

Department of Transportation

Status/Plans/Outcomes

Fairfax County's transit system, as part of a multi-modal transportation system, continues to enhance customer service through implementation of new technologies, customer care initiatives and implementation of bus service such as "Richmond Highway Express" (REX). As part of the County's multi-modal transportation program strong support continues for Metro and VRE service. Funding has been identified for purchase of new trains and rehabilitation of existing train cars allowing for expansion to eight car Metrorail trains under the Metro Matters Funding Agreement approved by the Board in November 2004. Financial support for VRE has contributed toward the purchase of new double deck passenger cars. The County subsidizes CUE bus service within Fairfax County for bus service to the Vienna/Fairfax GMU Metro Station. Ridership on all transit systems serving Fairfax County have seen increases with Fairfax Connector FY 05 ridership projected to be 8.5 million, Metrobus ridership at 9.1 million, Metrorail boarding's in Fairfax County projected to be 28.1 million and VRE boarding's to be 867,000. To further encourage use of mass transit during Code Red air quality alert day the entire region transit systems offer free rides to all passengers.

Resources

Fairfax County supports our multi-modal transit system with, annual general fund and general obligation bond support of \$23.06 million for Fairfax Connector, and \$47.7 million for Metrobus, Metrorail and Metro Access service, and \$3.42 million for VRE commuter rail service.

EIP07-AQ-B-21. Heavy Diesel Truck Exhaust Retrofit

Description of Action

Retrofit all class 8 diesel trucks in the county fleet with at least three years of service remaining with diesel oxidation catalysts.

Environmental Agenda Objectives Supported:

Air Quality and Transportation (general)

Other Plans or Documents where this action appears or that it supports:

None.

Lead Agency:

DVS

Status/Plans/Outcomes

A contract was awarded June 24, 2005 to retrofit over 100 trucks over a six-month period.

Resources

This project is funded partially by a grant of \$75,000 from the US EPA. Remaining costs (approximately \$75,000) are funded from the *FY 2003 Carryover*.

EIP07-AQ-C-1. Fuel Economy and Emissions Standards

Description of Action

Develop a formal federal advocacy strategy within the context of the Metropolitan Washington Air Quality Committee (MWAQC) collaborative process to increase fuel economy and emission standards for cars and light trucks. More stringent standards would reduce emissions of ozone precursors. Build upon previous County correspondence with the Virginia Congressional Delegation.

Environmental Agenda Objectives Supported:

Air Quality and Transportation #5

Other Plans or Documents where this action appears or that it supports:

None

Lead Agency:

Office of the County Executive – Environmental Coordinator

Status/Plans/Outcomes

Draft an advocacy plan for the County's MWAQC representatives to propose to the Committee. The intent would be to enact progressively stricter standards for fuel economy and emissions as a means of mitigating the production of ozone precursors. MWAQC might correspond with Congress to revise existing laws and with the Environmental Protection Agency and Department of Energy to initiate or accelerate rulemakings under current laws which advance this objective. MWAQC could also invite speakers and conduct workshops to facilitate and encourage coordinated efforts by members to communicate on their own authorities a unified message to Congress and the federal agencies.

Resources

It is expected that this strategy would be developed and conducted with currently authorized staff. No new resources are required.

EIP07-AQ-C-2. Annual Assessment of Alternative Fuel Vehicle Technology

Description of Action

DVS will conduct a literature review and consultation with industry sources and fleet users to evaluate the advisability of incorporating developing alternatives to petroleum diesel fuel in the county fleet. The objective is to identify ways to reduce the emissions and dependence on non-renewable resources of current vehicle and equipment systems. This evaluation will occur in the summer of each year until an avenue away from petroleum diesel fuel becomes clear.

Environmental Agenda Objectives Supported:

Air Quality and Transportation #6

Other Plans or Documents where this action appears or that it supports:

Air Quality Management Plan

Lead Agency:

DVS

Status/Plans/Outcomes

The first formal assessment is planned for summer 2005. DVS would update assessments each year until an effective and economically sound concept emerges. At that point, DVS would redirect efforts to implementing use of that alternative. As alternative fuels and the vehicles that use them continue development, we expect to identify one or more fuels that could displace some, and possibly eventually all, of our petroleum diesel fuel usage. We would be willing to pay some premium over the cost of current vehicles and fuels in order to achieve desired emissions reductions and reduced oil dependence. The course we choose would also demonstrate a viable strategy for other public and private fleets.

Resources

DVS will absorb the cost of annual assessments with currently authorized staffing.

Resources required for implementation of a future plan could be substantial, but will be unknown until the plan begins to take shape. No funding sources are yet identified. Federal grants are often available by competitive application for demonstration projects. Pursuit of grant funding would likely be part of the implementation effort once a concept is adopted. Significant levels of county funding over many years will also almost certainly be required.

EIP07-WQ-A-1. Strengthened Stormwater Management (SWM) Submission Requirements

Description of Action

Amendment of the Zoning Ordinance to require more substantial stormwater management information for rezoning, special exception, and special permit applications. Specifically, the amendment establishes a requirement for more substantial information regarding existing drainage conditions and proposed stormwater management and adequate outfall measures. This allows for a more thorough review of stormwater management and best management practice considerations during the zoning process in direct support of this Objective.

Environmental Agenda Objectives Supported:

Water Quality 2;
Growth & Land Use 5.

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan.
Infill and Residential Development Study

Lead Agency:

Department of Planning and Zoning

Status/Plans/Outcomes

On March 29, 2004, the Board of Supervisors adopted the Stormwater Management Facility Submission Requirement Zoning Ordinance Amendment, which expands the submission requirements for all special permit, special exception, rezoning, and development plan applications. This amendment became effective on July 1, 2004. Improved coordination between the Department of Public Works and Environmental Services and Department of Planning and Zoning during the reviews of zoning applications has been incorporated into standard operating procedures and is under way (see EIP 07-WQ-B-2). Future plans include:

- Continued monitoring of coordination progress and sufficiency of information provided in support of stormwater management requirements; and
- Consideration of an appropriate process to extend the stormwater management submission requirements to applications for lot width modifications that would result in the creation of one or more new lots.

Resources

None

EIP07-WQ-A-2. Stream Physical Assessment

Description of Action

An extensive set of baseline stream condition information has been collected throughout the county to support watershed protection and restoration efforts. This assessment was conducted on approximately 801 miles of streams, and results are being incorporated into the watershed planning process to assist in the determination of appropriate watershed management strategies. The assessments included an inventory of physical stream features and habitat assessments as well as inventory information such as stream obstructions; stream reaches experiencing erosion, insufficient riparian buffer areas, and dump sites along streams. In addition to benefiting the watershed planning process, this information will be useful in the consideration of land use decisions, as land use proposals can be evaluated within the context of identified stream deficiencies as appropriate resolutions can be considered during the development review process.

The County must respond to various regulatory initiatives, both mandatory and voluntary, to protect and/or improve stream health. Establishment and maintenance of data regarding baseline stream conditions is a critical first step to ensure that appropriate strategies are implemented and priorities are addressed. The data provide a basis for evaluating the overall effectiveness of controls, best management practices and policies designed to protect stream health.

Environmental Agenda Objectives Supported:

Water Quality 1, 2, 3, 7, 8, 9 and 10

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Watershed Management Plans

Lead Agency:

Department of Public Works and Environmental Services (DPWES)

Status/Plans/Outcomes

Initial baseline stream conditions have been established. Periodic updates will be needed to capture data on stream segments targeted for protection with new and/or expanded best management practices. It is also important to determine if stream conditions are degrading. A schedule for data gathering will be established, targeting areas where best management practices have been installed, expanded or modified.

The initial baseline data along with periodic updates will be used to measure the effectiveness of best management practices implemented. The stream physical assessment is an important tool to quantify progress, as an objective measure of how strategies are performing and to identify

EIP07-WQ-A-2. Stream Physical Assessment

Continued

where additional measures or changes in strategies are needed. This is a long-term process. Change will occur over time, typically measured in years.

Resources

Water quality monitoring occurs each fiscal year and data should be integrated into a relational database to track stream conditions, location of Best Management Practices (BMPs), changes in water quality, and other key parameters. An update of the total stream physical assessment should be scheduled every three to five years. A spot assessment should be done annually on segments that are priority sites as determined by review of the baseline report.

Staff time within on-going monitoring program and once every 3 to 5 years, the cost for the full assessment: \$200,000 to \$500,000 for contracted assistance.

This action is currently funded within the annual budget of the Stormwater Planning Division of DPWES.

EIP07-WQ-A-3. Perennial Stream Mapping and Resource Protection Area Expansion

Description of Action

To support the County's response to increased protection for the Chesapeake Bay, staff developed and implemented a perennial stream mapping protocol. In addition, amendment of the Chesapeake Bay Preservation Ordinance has ensured that all perennial streams are provided buffer areas. The mapping protocol provides for consistently defined perennial stream buffers across the county. This results in the refinement of Resource Protection Areas (RPAs). The County's Chesapeake Bay Preservation Ordinance was amended to establish the buffer requirements and defines the conditions that must be maintained within these RPAs.

Environmental Agenda Objectives Supported:

Water Quality 1 and 7.

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Watershed Management Plans

Lead Agency:

Department of Public Works and Environmental Services

Status/Plans/Outcomes

The mapping of the perennial streams is complete and the buffers have been delineated. Maintenance of the map layer is important. As technology changes over time, making this information available for use by individuals, developers, contractors and County staff more efficient and effective is important. The RPA network has expanded by 40% due to the completion of the mapping of the perennial streams.

Resources

No specific budget is required to maintain the mapping system unless technology changes drive new methodologies for map maintenance.

EIP07-WQ-A-4. Stormwater Needs Assessment

Description of Action

During calendar year 2004, the evaluation of current stormwater programs was undertaken, referred to as the Stormwater Needs Assessment (also see EIP07-WQ-B-3). Included in the review of services were all elements of current practices, from planning through long-term maintenance of the drainage system. A study component included the detailed evaluation of the cost of services to expand capabilities, with a significant focus on the capital improvement program being driven by the completion of watershed studies. A citizen-based advisory committee worked with the County staff and the consultant team to evaluate the issues, level of service and overall funding strategies. This project was completed in the summer of 2005.

Environmental Agenda Objectives Supported:

Water Quality 3, 7, 8, 9, and 10

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Department of Public Works and Environmental Services

Status/Plans/Outcomes

The Needs Assessment is complete and will be used in conjunction with other studies such as the Regional Pond Report, various watershed management plans, infrastructure replacement strategies and the Stream Physical Assessment to guide the growth of the program. Progress of the stormwater program will be monitored to determine the effectiveness of implemented strategies. The program plan will be adjusted during each budget cycle to address changes in priorities and accomplishments. Dedication of resources has been achieved through Board action to dedicate one cent of the real estate tax rate for stormwater management. This funding source should be analyzed for capacity to accomplish the goals of the program and to implement the Capital Improvement Program.

Resources

Staff resources will be dedicated to tracking progress.

EIP07-WQ-A-5. Occoquan Watershed Planning and Zoning

Description of Action

This action addresses recommendations in the New Millennium Occoquan Watershed Task Force report pertaining to the maintenance of the zoning actions that were taken in 1982 to protect the Occoquan Reservoir.

In 1982, the Board of Supervisors adopted Comprehensive Plan amendments relating to the Occoquan Watershed and rezoned nearly 41,000 acres in the Occoquan Watershed to the R-C (Residential Conservation) District in order to protect one of the County's major drinking water supplies. This rezoning action was taken concurrently with the establishment of the Water Supply Protection Overlay District of the Zoning Ordinance and other actions related to development near Washington Dulles International Airport.

Environmental Agenda Objectives Supported:

Water Quality 1, 2, and 10

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Board of Supervisors; Department of Planning and Zoning

Status/Plans/Outcomes

The Board of Supervisors has continued to maintain the integrity of the Occoquan zoning actions of 1982, and the Comprehensive Plan continues to strongly support this approach. No new actions are needed. A related action, however, is addressed in item EIP07-WQ-C-4.

Resources

No resources are needed.

EIP07-WQ-B-1. Watershed Management Planning

Description of Action

Starting in 2001, the County began the development of comprehensive watershed management plans for thirty (30) watersheds. These watershed plans will be used to establish the Capital Improvement Program investment needs for protection of water quality and stream health as well as plan an important role in permit compliance and Total Maximum Daily Load (TMDL) strategies. The Plans will generate project recommendations, policy recommendations and county-wide strategies with a planning horizon of twenty years.

The County has not updated its watershed management plans since the late 1970's. During the past 25 years, the County has grown to over one million people and is largely built-out. Stormwater management technology and engineering science has also changed over that time. In the late 1980's, Congress amended the Clean Water Act, adding specific mandates for the protection of water quality impacted by stormwater runoff. Fairfax County has been required to maintain a Municipal Separate Storm Sewer System (MS4) permit to protect the storm sewer system owned and operated by the County. Watershed management planning is an important strategy in establishing Best Management Practices (BMPs) for both water quantity and water quality control.

Environmental Agenda Objectives Supported:

Water Quality 1, 2, 3, 5, 7, 8, 9, and 10.
Growth and Land Use 5

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Department of Public Works and Environmental Services

Status/Plans/Outcomes

In Fiscal Year 2005, two plans have been completed and by the end of Fiscal Year 2006, 11 watershed plans will be complete. All 30 watershed plans will be completed by the end of Fiscal Year 2009.

The watershed plans drive the current investment strategy for the capital improvement program. In addition, as regulatory mandates are expanded to address TMDLs, under current Environmental Protection Agency guidance, the preparation and implementation of watershed plans can be used to establish compliance with the TMDL objectives. The County staff will track the creation of new TMDLs on stream segments within the County, amending watershed plans as

appropriate to keep the County in compliance. Periodically, the County will review the BMPs and technologies identified within the Plans, utilizing the Stream Physical Assessment and other tools to measure effectiveness of their implementation.

A watershed plan should be dynamic model of the watershed, updated as development is completed or if a major change in build out occurs, potentially impacting the infrastructure management strategies set forth in the plan. A protocol for plan maintenance will be defined and implemented to keep the plans current and useful in guiding stormwater management throughout the county. Watershed models are digital representations of the flow of runoff through the drainage and stream network. It is important that the digital models be maintained through changes in software and computer technology updates that occur within the organization.

Resources

It is estimated that the completion of the watershed plans will require an additional \$7.5 million dollars, \$3.5 million in General Fund and \$4.0 million in Pro Rata Share Funds. The contracts for completion of the watershed plans will be encumbered in FY 2006 with actual completion of the plan targeted in FY 2009.

EIP07-WQ-B-2. Stormwater Management Reviews During the Zoning Process

Description of Action

Increased involvement in the review of stormwater management issues during the zoning process by the staff of the Department of Public Works and Environmental Services (DPWES).

In 2004, the Board of Supervisors adopted an amendment to the Zoning Ordinance that required more substantial stormwater management information for rezoning, special exception, and special permit applications (see EIP07-WQ-A-1). Appropriate staff needs to review the additional information in order to ensure that effective controls and practices are incorporated into site designs; the involvement of DPWES in the review of stormwater management information submitted during the zoning process has, therefore, increased.

The rezoning reviews and comments by NVSWCD also pay special attention to stormwater management issues. Following a site visit, comments are sent to DPZ regarding soils, slopes, vegetation and other natural resources and the potential environmental impacts of the proposed land-use change. Recommendations are made for better site design and stormwater management practices that will improve the protection of streams and other natural resources, both on-site and off-site.

Environmental Agenda Objectives Supported:

Water Quality 1, 2, 3, 5, 7, 8, 9, and 10;
Growth and Land Use 5.

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Infill and Residential Development Study
Watershed Management Planning

Lead Agencies:

Department of Public Works and Environmental Services and the Department of Planning and Zoning

Status/Plans/Outcomes

The increased involvement in the zoning process by DPWES staff, as well as continued technical guidance provided by the Northern Virginia Soil and Water Conservation District, have facilitated, and will continue to facilitate, the identification and pursuit of viable site design and stormwater management approaches. Increased DPWES involvement in the zoning process is also providing for improved continuity from the zoning process to the site plan/subdivision plan review process. Another desired outcome is increased awareness of the impacts of development, and the implementation of best management practices, by the development community in support of County goals and regulatory mandates. This process is on-going.

Resources

Staff review time is dedicated to the effort but the need for new positions is not required. The cost of manpower is estimated to be \$110,000 annually, which is currently provided within the operating budget of DPWES.

EIP07-WQ-B-3. Stormwater Management Implementation Plan

Description of Action

This initiative includes implementation of the County's Stormwater Management draft program implementation plan, including strategies addressing the Regional Pond Report and follow up actions. One key element of the Plan is an expanded Capital Improvement Program, including a reinvestment strategy for the existing infrastructure. Fairfax County's stormwater management program includes responsibilities for runoff controls, including management of an extensive drainage system composed of pipe, open channels, stormwater management facilities, detention and retention ponds and natural waterways. In addition, the County is a regulator of development practices and the management of stormwater by private property owners.

Environmental Agenda Objectives Supported:

Water Quality 1, 2, 3, 5, 7, 8, 9, and 10;
Growth and Land Use 5.

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Department of Public Works and Environmental Services

Status/Plans/Outcomes

The Fiscal Year (FY) 2006 program plan reflects implementation of recommendations addressing various components – watershed plan implementation, regional pond construction, infrastructure replacement, stream restoration and flood proofing. The Capital Improvement Program will be expanded significantly to begin a new infrastructure replacement program as well as invest in reduction of backlog. Implementation of recommendations from the first watershed plans (EIP07-WQ-B-1) is included in the FY 06 program.

Each year, the staff will evaluate progress made and initiate or continue program elements to achieve the goal of a comprehensive approach to stormwater management within the county.

Resources

It is anticipated that the on-going services for stormwater management will grow annually as the capital reinvestment grows. The anticipated value of the capital improvement program, to rehabilitate the existing system along with the implementation of the watershed plans, is \$500 million to \$800 million. Investing 40 percent of the approved budget for the stormwater program should be sustained over the next 20 years to ensure that the system is viable for the long-term.

EIP07-WQ-B-4. Development of Amendments to County Codes and Regulations to Facilitate Low Impact Development

Description of Action

Acquire consultant services to assist in the development and implementation of a process to review County codes, regulations and policies and to develop recommendations for amendments that will encourage the use of low impact development (LID) practices.

Environmental Agenda Objectives Supported:

Water Quality 1, 2, 3, 5, 7, 8, 9, and 10;
Growth and Land Use 5.

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Infill and Residential Development Study
Watershed Management Planning

Lead Agency:

Department of Public Works and Environmental Services

Status/Plans/Outcomes

Department of Public Works and Environmental Services (DPWES) is currently working with a consultant to develop amendments to the Public Facilities Manual (PFM) to add six LID practices. It is anticipated that the process will result in additional amendments to the PFM, Zoning Ordinance and possibly other codes.

Resources

\$250,000 for contract services.

EIP07-WQ-B-5. Low Impact Development (LID)

Design Manual

Description of Action

In cooperation with the Engineers and Surveyors Institute (ESI), the Northern Virginia Regional Commission (NVRC) and other local jurisdictions, a manual will be developed that contains design and construction standards for low impact development practices. The manual will be recommended for adoption into the Public Facilities Manual (PFM) by reference either in its entirety or with minor specified differences.

Environmental Agenda Objectives Supported:

Water Quality 1, 2, 3, 5, 7, 8, 9, and 10;
Growth and Land Use 5.

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Infill and Residential Development Study
Watershed Management Planning

Lead Agency:

Department of Public Works and Environmental Services

Status/Plans/Outcomes

ESI and NVRC have already confirmed their desire to participate. A meeting with neighboring jurisdictions is currently scheduled in June 2005, to discuss the manual and to get their commitment to participate.

Resources

\$100,000 – It is anticipated that the costs for compiling the manual will be shared by the participating jurisdictions.

EIP07-WQ-B-6. Low Impact Development (LID)

Demonstration Projects

Description of Action

LID demonstration projects are being undertaken at four sites. One site is at the office of the Providence District Supervisor, where an LID retrofit will be designed and installed in a portion of the parking lot. This will include permeable pavers and a bioretention basin with underlying retention/infiltration gallery. Also, a green has been installed on one of the small buildings next to the parking lot. Partial funding is provided by a Department of Conservation and Recreation (DCR) grant entitled “Demonstrating Innovation: A Stormwater Retrofit at the Providence Supervisor’s Office.”.

The second demonstration project is at the site of Tinner Hill, along the Fairfax County/City of Falls Church border. This ½ acre site is being developed to commemorate the historic founding of the first rural branch of the National Association for the Advancement of Colored People (NAACP) in the nation. Funded by a DCR grant to Northern Virginia Regional Commission, an integrated system of nine LID practices (green roof, bioretention basin, permeable pavers, grass pavers, vegetated swale, infiltration trench, cisterns, carriage-style driveway, and amended soils) is planned to honor the original importance of water to this historic community as well contain stormwater on the site before it has an opportunity to develop into offsite runoff.

With the help of a DCR grant, the St. Louis Church in Little Hunting Creek Watershed is the third demonstration site. It includes bioretention basins to control runoff from roofs and parking lots, sidewalks with porous pavers and a forest restoration area. . A further expansion of this project has been approved as part of the Little Hunting Creek Watershed Plan implementation.

Under a grant from DCR, the Northern Virginia Soil and Water Conservation District and ATR Associates, Inc. completed a comprehensive hydrologic study and designed an LID-based stormwater management plan for the redevelopment of the 55-acre Occoquan Facility as the Lorton Workhouse Arts Center. The plan calls for a system of bioretention basins and cells, infiltration trenches, underground detention, porous pavers and pavement. Once the Lorton Arts Foundation and its engineers decide which practices will be included in the final plan, a monitoring plan and an education and outreach program will be developed.

These four projects will add to the demonstration projects already completed: In 2004, a rain garden was installed at Yorktowne Square Condominims in (DPWES, NVSWCD, Yorktowne Square, and DCR grant partnership). Also in 2004, a rain garden was installed at the former Lorton prison, on the site of the future Lorton Workhouse Arts Center (DPWES, NVSWCD, ATR Associates, and DCR grant partnership).

Environmental Agenda Objectives Supported:

Water Quality 1, 2, 3, 5, 7, 8, 9, and 10;
Growth and Land Use 5.

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Infill and Residential Development Study
Watershed Management Planning

Lead Agency:

Providence District Office Stormwater Retrofit:
Department of Public Works and Environmental Services (partnership with Providence District Supervisor and Northern Virginia Soil and Water Conservation District (NVSWCD))

Tinner Hill:
NVRC (partnership with DPWES and NVSWCD)

St. Louis Church:
Jeanette Stewart (Land and Water) (partnership with NVSWCD, DPWES)

Workhouse Arts Center:
NVSWCD (partnership with ATR Associates, DPWES, and DPZ)

Status/Plans/Outcomes

Projects are in various degrees of completion. Installation of the green roof has been completed at the Providence District Supervisor's office with the remaining retrofit practices scheduled to begin in the summer of 2005. A schematic plan for Tinner Hill has been completed in keeping with the DCR grant requirements and is now awaiting additional funding completion of final design and construction of the improvements. A bioretention basin has been planned for the St. Louis Church site and additional LID system practices are being considered. A comprehensive LID implementation plan has been developed for the Lorton Arts Center with an initial bioretention basin recently installed. Additional partnerships are anticipated in the future through the establishment of a Project within the Stormwater Business Area work plan for community grants and partnerships. The goal of this effort is to demonstrate the effectiveness of various low impact development practices, to evaluate their performance and to document the use of such practices for future application and use.

Resources

The Stormwater Planning Division and NVSWCD have provided design and technical consultation on these projects and will continue to do so. Staff time is budgeted for such efforts. It is anticipated that up to \$150,000 will be provided for in-kind services, matching grants from DCR to support construction of the four projects. Future support is budgeted at \$250,000 for continuing community partnerships.

EIP07-WQ-B-7. Stormwater Retrofits

Description of Action

Retrofitting exiting stormwater management facilities to provide improved stormwater management and water quality controls is a key goal for the on-going maintenance and operation of the system under county responsibility. The County is the owner or operator of over one thousand (1,000) stormwater management facilities. Management of the drainage system for long-term effectiveness and for environmental protection includes, where appropriate, addressing both quantity control (detention) to water quality controls. During the completion of the watershed planning process, opportunities will be identified for retrofitting existing stormwater facilities to provide new or additional water quality protection within the targeted watershed. These projects will include converting existing dry detention facilities by the addition of vegetation and wet pools.

Environmental Agenda Objectives Supported:

Water Quality 3

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Watershed Management Plans

Lead Agency:

Department of Public Works and Environmental Services

Status/Plans/Outcomes

Resources

Resource demands will be quantified as potential projects are identified. Funding would be provided in the overall stormwater program budget each fiscal year.

EIP07-WQ-B-8. Mitigation Requirements for Best Management Practice Waiver Approvals

Description of Action

Approval and implementation of waivers of Best Management Practices are conditioned on implementation of mitigation efforts. This involves the establishment of vegetative buffers and dedication of water quality management areas where buffers are established. This is one tool in the process of stormwater management for site development.

Environmental Agenda Objectives Supported:

Water Quality 1, 2, 3, 4, 9

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Department of Public Works and Environmental Services

Status/Plans/Outcomes

This is an on-going process and will continue with periodic review of policies and accomplishments in protecting stream health. This strategy for review of waiver requests should be reviewed to ensure that the desired outcomes are being achieved through the alternatives approved such as buffer protection. It is anticipated that the development process will continue to provide sufficient stormwater management practices to ensure that potentially negative impacts on the environment are mitigated. This practice of waiver approval is to provide a method for the County to work effectively with the development community while maintaining sufficient controls for stormwater management to protect the stream network.

Resources

Staff time is required for review and is incorporated in the current workload.

EIP07-WQ-B-9. Riparian Buffer Restoration

Description of Action

Fairfax County initiated a riparian buffer restoration project in March 2005 to restore natural function to the land in order to: improve water quality; protect streams and stream banks; improve wildlife habitat; and provide recreation and aesthetics. The countywide riparian buffer restoration project is being conducted in collaboration with volunteers and partners Earth Sangha, Virginia Department of Forestry, Fairfax County Park Authority, Northern Virginia Conservation Trust, and Fairfax ReLeaf. This project mitigates stormwater runoff into local streams and supports the Board of Supervisors' adopted Environmental Agenda.

Environmental Agenda Objectives Supported:

Water Quality 3, 7 and 8.

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Watershed Management Plans

Lead Agency:

Department of Public Works and Environmental Services

Status/Plans/Outcomes

The project was approved by the members of the Board of Supervisors on September 13, 2004. The county and partners completed a detailed evaluation of the inventory of buffer deficiencies from the recently completed countywide stream assessment. The project began with seven sites located on land owned by the Fairfax County Park Authority throughout the county. The seven sites are as follows:

- Luria Park
- Carney Park
- Greendale Golf Course
- Poplar Tree
- Folly Lick Park
- Laurel Hill
- Lake Fairfax Park

Invasive plant removals and the planting of native trees and shrubs were completed on the seven sites in April 2005. A total of 11,000 ft² of invasive plants were removed. Approximately 1,500 seedlings and 275 live stakes were planted. More than 100,000 ft² of land area was restored. Nearly 300 volunteers worked more than 1,000 hours to complete the invasive plant removals and plant native trees and shrubs in collaboration with county partners and county staff.

Media outreach, volunteer coordination, event promotion and Web site development were completed for the project during the first phase of restoration.

It is anticipated that restoration of a total of approximately 40 sites countywide will be completed by the summer of 2006. Twelve additional sites will be restored on Park Authority property and up to 22 additional sites will be restored through contracted plantings. Media outreach, volunteer coordination, event promotion, and Web site maintenance is slated to occur for future restoration sites.

The riparian buffer restoration project will continue to benefit the region by improving water quality, contributing to Chesapeake Bay tributary restoration, and providing opportunities for residents to learn more and get involved in improving the communities where they live, work and recreate.

Resources

The Board of Supervisors approved and allocated \$300,000 of funding for implementation of the riparian buffer restoration project which supports the Board's adopted Environmental Agenda.

EIP07-WQ-B-10. Stream Stabilization and Restoration Projects

Description of Action

Stream stabilization and restoration is an important objective in achieved improvement in the overall health of the stream system throughout the County. The Stream Physical Assessment completed in 2001 defines the needs along various stream segments. The current condition of the streams varies throughout the County and as watershed plans are completed, specific projects are being identified to address these situations. Interdisciplinary scoping, planning, design and construction processes are being developed and utilized to address the evaluation process as well as implementation strategies.

Environmental Agenda Objectives Supported:

Water Quality 8.

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Department of Public Works and Environmental Services

Status/Plans/Outcomes

Reestablishing stream corridors will contribute to long-term stabilization, aquatic improvements, increased habitat and healthier streams. Evaluation stream restorations will occur in the overall program assessment process.

Environmental consulting firms have been engaged through a multi-year contract to assist with these projects. In addition, qualified contractors have been pre-approved. This is a specialty practice in the construction industry requiring significant knowledge in environmentally sensitive construction strategies to stabilize a stream bed and stream bank while replanting appropriate native species to ensure long-term viability of the restoration. It is anticipated that additional projects will be identified in the watershed plans.

Resources

These projects will be included in the watershed management plans and will require funding through Capital Improvement resources. The magnitude can be in the millions of dollars. Typical restoration projects cost \$200 a linear foot.

EIP07-WQ-B-11. Septic System Tracking and Assistance Program

Description of Action

Health Department's inspection of septic systems and their requirement for septic system pump-out and maintenance on a regular basis, for example, every five years.

Environmental Agenda Objectives Supported:

Water Quality 10, 11.

Other Plans or Documents where this action appears or that it supports:

Lead Agency:

Health Department

Status/Plans/Outcomes

Approximately 22.8 million gallons of raw or partially treated sewage from more than 30,000 homes is discharged into Fairfax County soils daily. Properly designed, installed, and maintained onsite sewage disposal systems are unlikely to present adverse affects on water quality. However, systems that are improperly designed, installed and poorly maintained are likely to have limited life spans eventually resulting in system failure presenting potential adverse impacts on water resources.

There is an increasing trend in the development community to request use of technologically advanced, high maintenance, alternative onsite sewage disposal systems. Most alternative systems have intensive maintenance requirements. These systems include large numbers of mechanical components, which further increases the potential for malfunction. The eventual owner of the property with such systems is usually unaware of the high maintenance requirements. Failure to maintain and properly manage these systems can lead to premature, catastrophic failure.

Fairfax County currently operates in EPA Model Program Levels 1 & 2, which means that all onsite sewage disposal systems are inspected upon installation by the Health Department to determine compliance with appropriate state regulations and local ordinances. The Health Department maintains a database and records of installations, repairs, inspections, and system locations. A function of the database is to routinely notify homeowners of the requirement to have their septic tanks pumped every 5 years. The goal is to achieve a pump out rate of about one fifth per year.

Although onsite sewage disposal systems are required by County Code to have preventative maintenance by the County Code, enforcement is largely gained by voluntary compliance. All septic systems require periodic maintenance. The present level of regulatory oversight of onsite sewage disposal systems in Fairfax County relies heavily upon voluntary homeowner compliance. Presently, staff resources are insufficient to enforce preventative maintenance. Enforcement action, if necessary, is typically initiated upon presentation of a health hazard due to a failed system. No mechanism exists for routine inspection of existing on-site septic systems. Inspections of systems are only initiated through homeowners self reporting of problems, complaints, and voluntary evaluations for real estate property transfers.

Listed below are the numbers of septic tanks that have been pumped annually:

Fiscal Year	Number Pumped
FY99	1,009
FY00	3,295
FY01	4,263
FY02	4,168
FY03	4,171
FY04	4,273

Resources

Develop a management and tracking program for existing onsite sewage disposal systems, which:

- Establishes a process for routine inspections of the existing 30,000 existing disposal systems to identify systems that have failed or are in the process of failure due to neglect or overuse.
- Notifies property owners of the septic tank pump-out requirement and tracks compliance.
- Completes in depth surveillance and monitoring of high-tech alternative disposal systems.
- Completes in depth surveillance and monitoring of systems located in marginal to poor soils.
- Develops an outreach program to educate the new home buyer of the type of disposal system that they have purchased and the necessary maintenance issues associated with that type of system.
- Develops an outreach program that targets the real estate industry to educate realtors on the different disposal systems and the specific needs of each.
- Aids in the overall protection of groundwater and the Chesapeake Bay from runoff and contamination.

Current staff resources have transitioned from evaluating simple conventional sewage disposal systems in good soils to highly technical alternative sewage disposal systems in marginal to poor soils. More time is required to be spent by staff on processing, evaluating, and reviewing sites

EIP07-WQ-B-11. Septic System Tracking and Assistance Program
Continued

that will utilize alternative systems. Existing staff can only handle request for services for the installation of new systems and the repairs of older systems.

Request: 7 SYE to develop a sustainable management and tracking program.

Position Title	FTE/Grade	Salary/Staff	Fringe/Staff	Total
Environmental Health Specialist III	(1) / S-24	\$59,798	\$14,950	\$74,748
Environmental Health Specialist II	(5) / S-22	\$54,327	\$13,582	\$339,545
Admin Assistant II	(1) / S-13	\$26,885	\$6,721	\$33,606
Total Program Cost				\$447,899

EIP07-WQ-B-12. Erosion and Sediment Control Inspections – Compliance with New Mandates

Description of Action

The County is required to maintain a state-approved erosion and sediment control program that includes inspection of disturbed sites at an appropriate frequency to ensure compliance with E&S control requirements. HB1177 establishes the ability of the State to transfer to local governments the responsibility for oversight and issuance of authorizations under the General Permit for Land Disturbing Activities. The State is working under this mandate to transfer the responsibility for permitting land disturbing activities under the National Pollutant Discharge Elimination System program for the issuance and enforcement of industrial-class permits. State law establishes the date of transfer as July 1, 2006. The county must develop a program that can address State standards.

Environmental Agenda Objectives Supported:

Water Quality 6

Other Plans or Documents where this action appears or that it supports:

Watershed Management Plans
Comprehensive Plan

Lead Agency:

Department of Public Works and Environmental Services

Status/Plans/Outcomes

The County will participate in the process of rule making and program standard development over the next year. During the FY 2007 budget process, a plan of action to address the necessary staff and operating costs will be developed. The impact could be substantial on existing County resources. Fees are charged for these permits and the State will receive a portion of the fees. It is intended that the fees provide 100 percent recovery of the cost of the program. Fee structures have not been established for the delegated program but will be part of the rule making process.

In the Chesapeake Bay Region, the threshold for the requirement of compliance with the General Permit is the disturbance of more than 2,500 square feet. State DCR is required to develop program standards and model ordinances, including the approval of a local program prior to delegation of responsibility.

Resources

The current cost of services for this program is funded through fees paid by the development community. Delegation of the General Permit compliance will also be fee-based with the State taking 30 percent of the fee charged to the developer. Fees are to be determined during the

EIP07-WQ-B-12. Erosion and Sediment Control Inspections—Compliance with New Mandates
Continued

program development phase from DCR and Fairfax County will participate in the development of those fees.

EIP07-WQ-B-13. Soil Survey Project

Description of Action

The Fairfax County Soil Survey, originally published in 1963, is being updated under the leadership of the USDA's Natural Resources Conservation Service, in partnership with the county and NVSWCD. Originally published in 1963, the Soil Survey was based on field work completed in 1955 and covered 60% of the county. Over the last 45 years, the science of soils has progressed, particularly in the area of soil taxonomy. Much of the information now used to describe soils, including their properties, characteristics and interpretations, was not available at the time the original survey was published. Additional soils work done by the county between 1966 and 1990, but was never completed nor certified to national standards. The updated soil survey will reclassify the soils and provide updated interpretive information. More accurate soil boundaries will be plotted on the maps where necessary and the remainder of the county that was not surveyed will be mapped. The survey will be certified to Cooperative National Soil Survey standards and incorporated into the National Soils Information System. The new soil survey map will be published electronically as a GIS layer and linked to an extensive database of comprehensive soils information.

Environmental Agenda Objectives Supported:

Growth & Land Use 5;
Water Quality 2, 5

Other Plans or Documents where this action appears or that it supports:

Watershed Plans

Lead Agency:

Northern Virginia Soil and Water Conservation District
GIS, DPWES

Status/Plans/Outcomes

Approximately one-half of the work has been done, with completion scheduled for 2007. In addition a special study is underway, in conjunction with a national initiative to learn more about the behavior of soils that have been disturbed by human activity. A large percentage of Fairfax County soils have been or will be disturbed at some time, and once disturbed, they no longer have their original structure. Human disturbed soils are generally denser and less permeable than undisturbed soils and create more runoff than undisturbed soils. Knowing the behavior and characteristics of human disturbed soils is vital for understanding the stormwater management and erosion issues that will affect Fairfax County in the future, especially as efforts towards meeting the Chesapeake Bay Agreement intensify.

Resources

County and NRCS funds have been committed for the soil survey update.
The county's contribution to the project over a five year period is approximately \$780,000.

EIP07-WQ-B-14. Soil and Water Quality Conservation Planning for Horse Operations and Other Land in Agriculture

Description of Action

Soil and Water Quality Conservation Plans are developed for all land in agricultural use, which in most cases in Fairfax County are horse-keeping operations. The plans are written to comply with the Chesapeake Bay Preservation Act guidelines. They include best management practices to reduce: sediment pollution from erosion; excess nutrients from animal waste and fertilizers; and the misuse of pesticides and herbicides. The plans also include the establishment and maintenance of vegetated riparian buffers next to all streams and other Resource Protection Areas. As required by county ordinance, soil and water quality conservation plans are developed for all agricultural and forestal districts in the county. Plans are updated and technical assistance is provided by NVSWCD as needed. Conservation plans are developed for landowners receiving state cost-share money to install BMPs such as manure storage and composting structures, to fence animals out of stream, and to design pastures and watering systems that make more efficient use of the land and protect natural resources. An on-going outreach and education program encourages land owners to manage their land in an environmentally responsible way. This includes presentations at community events and distribution of the publication, *Agricultural Best Management Practices for Horse Operations in Suburban Communities*.

In addition, nutrient management and integrated pest management plans are reviewed, or developed, for nursery operations, golf courses, and other land uses.

Environmental Agenda Objectives Supported:

Water Quality 1, 7, 10
Environmental Stewardship 2

Other Plans or Documents where this action appears or that it supports:

Chesapeake Bay Preservation Ordinance
New Millennium Occoquan Watershed Task Force Report

Lead Agency:

Northern Virginia Soil and Water Conservation District

Resources

This work is done as part of the NVSWCD annual plan of work.

EIP07-WQ-C-1. Watershed Management Planning: Policy Review

Description of Action

During the Watershed Planning process a number of policy-related recommendations have been provided by the citizen-based steering committees as well as the consultants completing the plans. It is anticipated that additional policy-related recommendations will be generated as the watershed management planning process continues. Once the planning process has progressed sufficiently, it will be important to compile and review all the policy recommendations to determine their viability and to address other strategies recommended that may require changes in policy and/or regulation to be implemented.

Environmental Agenda Objectives Supported:

Water Quality 3

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Department of Public Works and Environmental Services

Status/Plans/Outcomes

Upon completion of the first five watershed plans in the spring of 2006, an initial evaluation of policy recommendations will be completed. Based on this review, actions may be recommended immediately or may be reconsidered upon completion of all the watershed plans. Where it is critical that changes be made to existing policies in order to move ahead with plan implementation, there will be a strategy initiated to address those recommendations. The County will evaluate all the policy recommendations from the various watershed plans with the final plan completion anticipated to occur in 2009.

Resources

Staff resources will be dedicated to tracking policy recommendations. A review will be initiated during calendar year 2006 to determine whether to proceed with an interagency policy evaluation strategy to potentially recommend changes to the Board of Supervisors. Resources will come from the Stormwater Management program budget. An interagency evaluation process would require additional staff resources from other agencies.

EIP07-WQ-C-2. Standard Operating Procedure for Stormwater Management Reviews During the Comprehensive Plan Amendment Process

Description of Action

Establishment of a standard operating procedure for stormwater management reviews during the Comprehensive Plan amendment process.

A standard procedure for review of the Comprehensive Plan amendments with regard to impacts on stormwater management within the County needs to be developed. Currently, staff from the Department of Public Works and Environmental Services (DPWES) participates during the Area Plans Review (APR) and Out-of-Turn Plan Amendment (OTPA) processes on an *ad hoc* basis as initiated by individual DPZ staff members. In light of increasing State and Federal stormwater management initiatives and regulatory mandates, and in light of the development of watershed management plans and the implications of land use changes to conditions and recommendations identified within these plans, a more consistent and formal process is suggested.

Environmental Agenda Objectives Supported:

Water Quality 1, 2, 3, 5, 7, 8, 9, and 10;
Growth and Land Use 5

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Watershed Management Planning

Lead Agencies:

Department of Public Works and Environmental Services and the Department of Planning and Zoning

Status/Plans/Outcomes

Currently there is not a standard procedure for use by the Department of Public Works and Environmental Services. Strengthened coordination between DPWES and DPZ during the reviews of Comprehensive Plan Amendments would provide for early identification of critical stormwater management considerations and improved consistency in the consideration of stormwater management issues.

Resources

Staff resources will be dedicated to implementation of this strategy. Costs of enhancing DPWES coordination on stormwater management issues during the APR and OTPA processes would be absorbed into the operating budgets of DPZ and DPWES; no new staff resources would be requested directly in response to this action; however, the incremental staff resource burdens of this action, related actions, and other actions needed to support the Board's Environmental Agenda may necessitate additional staff levels in the future.

EIP07-WQ-C-3. Comprehensive Review of the County's Code and Zoning Requirements

Description of Action

This action would be a comprehensive review of site design requirements within the context of better site design principles (i.e., the Model Development Principles developed by the Center for Watershed Protection through its Site Planning Roundtable). The goals of the effort would be to identify regulatory impediments to a broader application of better site design principles in Fairfax County, to identify potential policy conflicts between better site design and other issues (e.g., the desire for adequate parking capacity vs. the desire to minimize impervious cover), and to draft appropriate Zoning Ordinance and/or other County Code amendments for consideration by the Planning Commission and Board of Supervisors.

Environmental Agenda Objectives Supported:

Water Quality 1, 2, 3, 5, 7, 8, 9, and 10;
Growth and Land Use 5

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Infill and Residential Development Study
Watershed Management Planning

Lead Agency:

Department of Public Works and Environmental Services (DPWES) and the Department of Planning and Zoning (DPZ)

Status/Plans/Outcomes

This review has not yet been initiated, although staff is coordinating with the Center for Watershed Protection on the possible application of a Site Planning Roundtable process in Fairfax County. A number of approaches could be taken to the implementation of this action. This could be done through an internal review by appropriate County agencies (DPZ, DPWES, and Department of Transportation), with coordination with the Planning Commission and Board of Supervisors and with stakeholder outreach at appropriate steps in the process, through a consultant contract, or through the Center for Watershed Protection's "Builders for the Bay" program (involving the establishment of a Local Site Planning Roundtable consisting of a diversity of stakeholders).

Resources

This would be a significant effort involving considerable staff time and resources regardless of the approach that is taken. If this effort is to be pursued through an internal staff review, other initiatives would need to be delayed—it is anticipated that the effort would need to be pursued by existing staff and that new staff resources would not be sought (the process will, by necessity, require considerable institutional knowledge). A very broad, order of magnitude estimate of what it might cost to hire a qualified consultant to conduct and complete this review would be \$100,000. Additional resources would likely be needed for a “roundtable” type program (estimated to total between \$200,000 and \$250,000). However, it should also be noted that there are numerous opportunities to apply for grants to fund such efforts, and staff anticipates that this funding would be sought for any efforts to implement this action.

EIP07-WQ-C-4. Review of Standards and Guidelines for Special Permit, Special Exception, and Public Uses in the Resource Conservation (R-C) District

Description of Action

As recommended in the New Millennium Occoquan Watershed Task Force report, this action would provide for a review of standards and guidelines associated with Special Permit, Special Exception, and public uses that may be approved in the R-C District. R-C zoned land is generally confined to the Occoquan Watershed (with Fort Belvoir being a major exception, albeit one that is not subject to County zoning requirements). Included in this review would be:

- Maximum allowable floor-area ratios;
- A consideration of development of standards and/or guidelines for impervious cover and/or undisturbed open space;
- Impacts of facility footprints and total impervious cover, including parking; and
- A consideration as to whether more specific guidance should be established in the Comprehensive Plan regarding mitigation of impacts on the water quality impacts of the Occoquan Reservoir.

The process through which such a review would occur has yet to have been determined. The New Millennium Occoquan Watershed Task Force has recommended that a broad-based advisory committee be established. More efficient approaches that still provide for significant stakeholder involvement may be available, and County staff has recommended coordination with the Planning Commission on the definition and scope of this effort.

Environmental Agenda Objectives Supported:

Growth and Land Use 5
Water Quality 1, 2, and 10

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

Department of Planning and Zoning (DPZ)

Status/Plans/Outcomes

This review has not yet been initiated.

Anticipated outcomes would be clarity regarding expectations governing Special Permit, Special Exception, and public uses that may be pursued in the R-C District in the Occoquan Watershed.

Resources

Resource needs will depend on the specific process that is pursued. However, even under the most efficient process, substantial staff resources will be needed; between two and four professional-level planners would need to devote a considerable portion of their work hours to this effort for a year or more. Additional clerical and supervisory resources would be needed, and a number of County agencies beyond DPZ would need to become involved to some extent (e.g., Department of Public Works and Environmental Services; Fairfax County Park Authority; Fairfax County Public Schools).

EIP07-SW-A-1. Provide Convenient Access to Recycling Bins

Description of Action

Provide recycling drop-off centers in the County. Providing convenient access to recycling bins is understood to require two separate sub-tasks as follows: 1) placing additional recycling containers in county buildings; and 2) Reviewing the placement of recycling containers around the county for use by residents.

Recycling at County Buildings— Recycling containers for *paper* are available in all county-owned buildings.

Recycling Containers for Residents--Recycling containers for use by county residents are available at eight recycling centers located throughout the county. Locations and directions to these centers are listed on the county website. The continued use of drop off centers will undergo review as the county expands the residential curbside and business recycling programs.

Environmental Agenda Objectives Supported: Solid Waste 2 and 5

Other Plans or Documents where this action appears or that it supports:

County's 20-year Solid Waste Management Plan, published in 2004

Lead Agency: DPWES-DSWDRR and DSWCR (collectively, the Solid Waste Management Program)

Status/Plans/Outcomes: The base assignment has been completed. Moreover, plans to add beverage container collection to the existing paper program at County buildings are under development. Most of the large buildings owned by the County currently have recycling containers for bottles and cans, but in kitchen areas only. In order to place recycling containers for bottles and cans in all County buildings, containers will need to be purchased and staff made available to collect this additional material from the additional locations. This activity will also need to be coordinated with the Department of Facilities Management.

Placing recycling containers at convenient locations for the public has been accomplished through the provision of recycling drop off centers. Since the county only provides refuse and recycling service to a small portion of the County's residences, it has no means to collect recyclables on a broader basis. The County would also need to gain permission from property owners to place recycling containers on private property. If the refuse and recycling system in the County changes in the future, there may be new opportunities to add locations.

Resources: The equipment and manpower for the operation of the recycling drop off centers are included in existing operational budgets. Cost estimates for future initiatives have not yet been evaluated. There are no additional funding sources for the placement of recycling containers for the collection of bottles and cans in county buildings, nor for the placement and collection of recyclables from additional locations other than the existing drop off center network.

EIP07-SW-A-2. Reduce Idling Times for Trucks Waiting to Dispose of Waste at I-66 Transfer Station

Description of Action

Add an additional incoming scale at the I-66 Transfer Station to reduce the idling times for trucks waiting to dispose of waste.

Environmental Agenda Objectives Supported: Solid Waste (General); Air Quality and Transportation 1

Other Plans or Documents where this action appears or that it supports:

Action not specifically listed elsewhere, but is consistent with goals within the County Solid Waste Management Plan.

Air Quality Management Plan

Lead Agency: DPWES-DSWDRR and DSWCR (collectively, the Solid Waste Management Program)

Status/Plans/Outcomes: Action completed. The capacity for processing incoming vehicles was doubled by adding an additional above ground truck scale adjacent to the existing one, as part of a Station upgrade to meet increased user demand from collection companies expanding their collections in the northern and western parts of the County. By adding the scale, staff effectively reduced wait or idling times of trucks by 50%. Intuitively, air pollution from the idling trucks will be reduced by a similar percentage.

Moreover, the new scale reduces the possibility of waiting trucks having to queue onto West Ox Road while waiting to be weighed into the facility. At such times, this line could interfere with other traffic on that road, causing it to slow. The upgrade therefore further reduces the potential for pollution from idling engines thus slowed on West Ox.

Resources: Total project cost was approximately \$93,000, to install the scales and the associated data collection systems for billing and information management. Ongoing annual maintenance costs for the additional scale will range from \$5,000-8,000 per year.

EIP07-SW-B-1. Pollution Prevention Program – E/RRF Emissions Controls

Description of Action

Ensure that E/RRF facility continues to have state-of-the-art technology to remove as many harmful emissions as possible.

Environmental Agenda Objectives Supported:

Solid Waste 1

Air Quality and Transportation (General)

Other Plans or Documents where this action appears or that it supports: None

Lead Agency: DPWES-DSWDRR and DSWCR (collectively, the Solid Waste Management Program)

Status/Plans/Outcomes

As relevant new pollution control technology has been developed, it has been installed. Upgrades since 2000 include carbon injection (to control mercury), ammonia injection (to reduce nitrogen oxides), a lime scrubber (to remediate acid gases), an upgraded continuous emissions monitoring system, and a dolomitic lime system (to further stabilize ash into a form safe for landfilling).

As the pollution control technology at the ERR/F is genuinely state-of-the-art, the emphasis must now focus more on improving the quality of the fuel delivered to the facility, expanding programs that prevent constituents of concern from entering the E/RRF all together. Batteries and other materials that should not be processed in the facility are now collected separately at the I-66 and I-95 Household Hazardous Waste (HHW) sites. The Conditionally Exempt Small Quantity Generator (CESQG) program will hold three events in 2005, to collect materials from businesses that generate small amounts of hazardous waste. Recently, a program to collect “NiCad” and other rechargeable batteries was initiated at the citizen drop-off facilities, and a program to promote recycling of NiCad batteries by local businesses is being developed using carry-over funds from FY2004. Collaboration with the Rechargeable Battery Recycling Coalition is currently being established to publicize a “take back” program for retailers who sell batteries. Concurrent with these events that target toxics in the waste stream, community clean up events funded by FY2004 carry-over are being coordinated to allow appropriate collection and disposal of materials generated by the clean-ups.

Resources:

Annual Cost of Action: \$1,530,000 - Cost of Future Plans: \$50,000 per year for pollution prevention and outreach programs.

EIP07-SW-B-2. Expand Recycling Programs

Description of Action

Continue emphasis on recycling for residents and businesses; continue the County's current recycling program of curbside pickup of recyclable bottles, cans, and newspaper. County's Solid Waste Management Plan recommends that curbside recycling be expanded to include additional materials for which markets exist, such as mixed paper, corrugated cardboard, and plastic bottles and jugs. Recycling opportunities need to be improved for County businesses also. The business recycling improvement program will focus on increasing the quantity of "traditional" recyclables collected from businesses (paper, cardboard, etc.), developing opportunities to recycle construction and demolition debris (CDD), and increasing recycling of special wastes such as electronics.

Environmental Agenda Objectives Supported: Solid Waste 2 and 5

Other Plans or Documents where this action appears or that it supports:

20-year Solid Waste Management Plan for Fairfax County, published 2004

Lead Agency: DPWES-DSWDRR and DSWCR (collectively, the Solid Waste Management Program)

Status/Plans/Outcomes:

Proposed modifications/expansions to the residential and business recycling programs are in progress. Continued activities will be developed and implemented according to the Solid Waste Management Plan. A specific project of note is the education and outreach initiative being funded by FY2004 carry-over money, being developed in coordination with the Chamber of Commerce and the Small Business Commission.

Resources

Annual program costs are approximately \$100,000. Program expansion may increase these costs to approximately \$500,000 per year. These costs are solely for the public outreach and assistance aspects of the County's recycling program: actual materials collection and recycling costs are borne by the individual waste generator. Future costs assume ongoing support of the new initiatives over several years.

EIP07-SW-B-3. Encourage Use of Recycled Products through Environmentally Preferable Purchasing (EPP)

Description of Action

Encourage use of recycled products to expand the market by developing an Environmentally Preferable Purchasing (EPP) Program for use by county purchasing staff and private-sector business. This will allow more ready-access by potential buyers to products where use or manufacture includes recycled content and/or has the least impact on the environment. It is widely accepted that promoting the purchase of environmentally-friendly products will in turn stimulate and expand markets for recyclables.

Environmental Agenda Objectives Supported: Solid Waste 3 and 4

Other Plans or Documents where this action appears or that it supports: N/A

Lead Agency: DPWES-DSWDRR and DSWCR (collectively, the Solid Waste Management Program)

Status/Plans/Outcomes:

The Solid Waste Management Program teamed with the Department of Purchasing and Supply Management (DPSM) to prepare a grant application to the USEPA for the development of an EPP program: the application was denied in April 2005. The Solid Waste Management Program and DPSM are discussing the approach that should now be taken since funding is not available from outside sources (i.e., will look to internally fund this initiative). The county will be able to report on the quantity of recycled products and other environmentally preferable products purchased by the county through this program. Businesses may be able to provide the county with information about their efforts to purchase these products also.

Resources

Annual program costs are estimated at approximately \$50,000. Funding sources have not been identified since the USEPA grant was not awarded to the county. Staff will pursue alternative funding resources including requests for funding from the general fund.

EIP07-SW-B-4. Increase County Use of Recycled Products

Description of Action

In order to increase the county's use of recycled paper and other products with significant post-consumer recycled content, staff will update and expand the scope of the following County Procedural Memoranda (PM) regarding the use of recycled-content products, and will request visible and active support for these policies from the Board and the County Executive:

1. PM 25-08-Bid Specifications to Include Recycled Content; and
2. PM 25-09-Waste Reduction and Recycling Policies.

Revisions will render these PMs more applicable to current market conditions, and to serve as a kick-off point for expanded efforts to promote participation by county agencies (currently, few agencies participate). To this end, the PMs will be placed on the DPSM section of the Infoweb, to make them more accessible to purchasing staff.

Staff will request a formal statement of support from the Board of Supervisors and the County Executive to be distributed to and implemented by all county agencies. The Employee Recycling Committee (ERC) will be used to build broader support for the purchase and use of recycled content products. Staff from the Solid Waste Management Program will also work with the Office of Public Affairs' (OPA) Communication Strategy Development Team to help establish policies that maximize the use of paper with recycled content for the production of county documents.

Environmental Agenda Objectives Supported: Solid Waste 4

Other Plans or Documents where this action appears or that it supports: N/A

Lead Agency: DPWES-DSWDRR and DSWCR (collectively, the Solid Waste Management Program)

Status/Plans/Outcomes:

Project is underway. The Solid Waste Management Program will continue exploring ways to communicate the benefits of using materials with recycled content with key staff. Ongoing communication strategies need to better link this initiative to the county's environmental policy, to draw staff support and place the need to comply in the context of the larger environmental improvement work being undertaken by the county. It is expected that increases in the purchase of materials with recycled content will be reported by county agencies.

Resources

Both the Board of Supervisors' and the County Executive's visible and active support of this policy will be critical in creating an atmosphere where county agencies will implement this program. Annual program costs are estimated at approximately \$10,000.

EIP07-SW-B-5. Improve County Control of Solid Waste

Description of Action

Work with the County's Federal delegation to overturn the Supreme Court's "Carbone" decision that limits local government's ability to control the flow of solid waste within its own boundaries.

Context

The County will continue to seek opportunities to gain congressional support for overturning the "Carbone" decision that limited the County's solid waste flow control authority. Stand alone legislation on flow control has been unsuccessful on a number of occasions in the past. Current efforts, being pursued through the County's lobbyist in Washington, focus on the identification of related legislation to which flow control authority can be added. Additional efforts include attempts to garner support from national organizations such as NACO and SWANA to broaden the interest of Congress in this legislation.

Environmental Agenda Objectives Supported: Solid Waste 6

Other Plans or Documents where this action appears or that it supports: N/A

Lead Agency: DPWES-DSWDRR and DSWCR (collectively, the Solid Waste Management Program)

Status/Plans/Outcomes: Effort is ongoing - support received in the past has been limited to "grandfathering" the county's flow control authority until the revenue bonds issued for construction of the Energy/Resource Recovery Facility have been paid. This will occur in six years, so as we approach that time the value of the legislation will decrease.

Resource needs identified below relate to use of a lobbyist in Washington. Costs vary significantly from year to year. Current estimate is based on most active years. Future cost assumes decreasing efforts as we approach bond payoff. Based on previous reception in Washington to this topic, once the revenue bonds for the facility are paid off in 2011, there will be little interest in providing the County with flow control.

Resources

Annual program costs are estimated at approximately \$25,000, with future costs increasing to an estimated \$100,000 per year.

EIP07-PT-B-1. 10-Year Pedestrian Capital Plan

Description of Action

A pedestrian task force was formed in 2004 to develop a safety awareness campaign and a 10 year pedestrian capital plan. County staff and citizens are on the task force. Complete capital plan in 2005 and seek funding to implement.

Environmental Agenda Objectives Supported:

Parks Trails and Open Space 3; Growth & Land Use 2, 4, & 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

DOT

Status/Plans/Outcomes

Underway

Resources

Cost: \$2,000,000

EIP07-PT-B-2. Trail Projects/Pedestrian Improvements

Description of Action

In the FY 2005 Budget, the Board of Supervisors appropriated \$2.5 million in general funds for streetlight, drainage, sidewalk, trail and walkway projects. Of this general fund amount, \$676,000 was earmarked for sidewalks and trails construction. Both the Non-Motorized Transportation Committee and the Pedestrian Task Force are currently developing a list of priority projects to be completed using both available and future funds to achieve a comprehensive interconnected trails system throughout the County. In addition, on November 2, 2004, County voters approved a \$165 million General Obligation Bond Referendum as part of the Board's four-year Transportation Plan. Within the Board's four-year Transportation Plan, \$10.8 million was designated to fund Countywide pedestrian improvements such as sidewalks and trails, and improvements for bus stops and crosswalks, as well as pedestrian improvements for the Richmond Highway Initiative.

Environmental Agenda Objectives Supported:

Parks, Trails and Open Space 3; Growth & Land Use 2, 4, and 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

DPZ

Status/Plans/Outcomes

Underway

Resources

Annual Cost: \$2,000,000

The budget should continue to provide an annual commitment for funding missing links to the sidewalk and trail system. An annual fund of at least \$2,000,000 should be available for this purpose. Because the inventory of trail needs is not complete, the total construction cost to complete an interconnected trail network in the County is unknown.

EIP07-PT-B-3. Pedestrian Improvements in the Four Year Transportation Plan

Description of Action

The Fairfax County Board of Supervisors Four Year Transportation Plan, highlighted by the Route 1 Initiative, provides funding of nearly \$11 million for pedestrian improvements.

Environmental Agenda Objectives Supported:

Parks, Trails and Open Space 3; Air Quality & Transportation. 1; Growth & Land Use 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Board of Supervisors Four Year Transportation Plan

Lead Agency:

DOT

Status/Plans/Outcomes

Underway

Resources

Approximately \$11 million for pedestrian improvements, particularly related to the Route 1 Initiative, as provided in Board's Four Year Transportation Plan.

Actual expenditures on yearly basis undetermined; approximately \$11 million total available for timeframe of late 2004 into 2008 primarily. Board of Supervisors Four Year Transportation Plan provides necessary funding of \$11 million to accomplish the future plans noted above.

EIP07-PT-B-4. Pedestrian Improvements as part of the State's Secondary Construction Program

Description of Action

The Board of Supervisors prioritized nearly \$4 million for pedestrians within the State's Secondary Construction Program for pedestrian improvement projects at priority intersections throughout the County, such as locations with high numbers of pedestrian crashes.

Environmental Agenda Objectives Supported:

Parks Trails and Open Space 3; Air Quality and Transportation 1; Growth & Land Use 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

DOT

Status/Plans/Outcomes

Improvement projects to be carried out through the State's Secondary Construction Program

Pedestrian improvement projects to be carried out at priority intersections throughout the County as part of State Secondary Construction Program.

Resources

\$0

Cost of Future Plans: \$4,000,000

Actual expenditures undetermined on a given year basis; \$4 million identified within State Secondary Construction Program, a six-year program updated annually.

EIP07-PT-B-5. Trails Inventory and Planning

Description of Action

Continue to update the existing trails map to help identify missing trail links. Inventory and prioritize the missing links for trail construction in conjunction with other priority projects considered by the Non-Motorized Transportation Committee.

Use the most current aerial imagery available from County orthophotography data set and field checks to identify the missing links of the major commuting or recreational trail routes and prioritize which links should be completed first.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 3; Air Quality and Transportation 1; Growth & Land Use 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency:

DPZ

Status/Plans/Outcomes

Action is under way

Update of the existing trails map will continue as long as aerial imagery is updated on schedule. It is hoped that at some future point the County records of newly completed development are made available to the Department of Planning and Zoning to be used to update the sidewalks and trails map. Data must be updated and funding to construct the remaining missing links must be identified.

Resources

The current costs of this effort are being absorbed within staff's routine work schedule. However, an annual fund of at least \$2,000,000 should be available for continued trail development in order to make progress on the bridging of gaps in the system (see EIP07-PT-B-2). With respect to future costs, because the inventory is not complete, the total construction cost can not yet be determined.

EIP07-PT-B-6. Develop Cross County Trail

Description of Action

Work to connect stream valley trails and roadside trails to create a 38-mile long continuous, multi-use trail from the Occoquan River to the Potomac River at Great Falls Park (including some initial work on the Laurel Hill Greenway) will be completed in CY 2005. The trail will have multiple points of access. There will be maps as well as interpretive and directional signs to assist users in understanding what they are observing and directing them to parking, drinking water, points of interest, etc.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 3; Air Quality and Transportation 1; Growth & Land Use 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency

FPCA

Status/Plans/Outcomes

Underway

While the trail will be completed in CY 2005, future efforts will need to focus on continuous improvements to the trail (surfaces and stream crossing upgrades); connections to other areas of interest and the full build out of the Laurel Hill Greenway connection.

Resources

Near Term Cost: \$5,500,000 (funded)

Cost of Future Plans: \$4-6 million

This trail is funded in the amount of \$4.5 million, with \$1 million in 2004 bond funds designated for work on the Laurel Hill Greenway. An additional \$1 to \$2 million is needed, with \$3 or \$4 million necessary for the full build out of the trail through the Laurel Hill Greenway trail. This trail will form the main north/south multi-use trail connector in the county, running along woodland stream valley trails for much of its length. The trail includes numerous stream crossings and crosses many of the county's main east-west roads. Where no off-road route is possible, the CCT follows existing roadside trails or sidewalks.

EIP07-PT-B-7. Park Authority Trail System

Description of Action

Continue to develop the Park Authority trail system through the park bond program and through volunteer efforts. Evaluate missing links, needed trail network connections, planned but not constructed trails within parks, and access to parks through nearby neighborhoods. Design trail connections in an environmentally sensitive way. Implement designs through traditional bid and construction methods, or with volunteer effort.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 3; Air Quality and Transportation 1; Growth & Land Use 7

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency

FCPA

Status/Plans/Outcomes

Continue to implement the countywide trails plan in stream valley parks and within local-serving and other managed parks. Connect parks via trails to population centers and other trails in the trail network.

Resources

Annual Cost: \$1,525,000

Cost of Future Plans: Approximately \$75 million

The Park Authority trail program is funded in the amount of \$4.9 million for the next 4 years through the 2004 park bond program. An additional \$1.2 million has been secured in promised grant money for this time period. An additional 75 miles of trail are needed in the park system during the next ten years. These trails will be developed with a combination of county funds, bond funds, volunteer efforts, and grant funding. At an average cost of \$1 million per mile, \$75 million will be needed to implement this trail program to its fullest extent. Park Authority trails form the main off-road countywide trail system. It is essential to continue to develop these trails at a quick pace to attempt to meet the desire for trails as expressed in the needs assessment.

EIP07-PT-B-8. Interpretive Signs Along FCPA Trail System

Description of Action

Evaluate opportunities for outreach and education along the trails. Develop general overviews and themes for the focus of the trail signs. Identify specific interpretive location types. Create text and graphics for signs to help the trail users understand the world around them and their relationship to it. Contract for the sign construction. Install sign as appropriate along the trails within the park system.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 3; Environmental Stewardship (General)

Other Plans or Documents where this action appears or that it supports:

Park Authority Strategic Plan

Park Authority Policy Manual

Park Authority Natural Resource Management Plan

Lead Agency

FCPA

Status/Plans/Outcomes

Continue developing the sign program along trails within the county parkland.

Resources

Annual (FY 2006) Cost: \$28,000 (funded)

Cost of Future Plans: \$750,000

Comments: The Park Authority has a grant in the amount of \$28,000 for trailhead signs and interpretive signs for the Cross County Trail. Other trail signage is not funded at this time. As the program is created funding needs will become evident. Interpretive signs cost in the neighborhood of \$500 to \$1,000 to develop and an additional \$500 to \$1,000 to produce.

Estimating 250 total miles of trail, and estimating two signs per mile, the program would cost between \$500,000 and \$1 million to complete. Because trails are the most heavily used facility within the park system, there is an opportunity for stewardship education. Many of the one million people in the county would be exposed to this sign program and benefit from it.

EIP07-PT-B-9. FCPA Urban Pocket Parks

Description of Action

The Park Authority has an ongoing program to acquire new park lands and develop/redevelop park sites based on demonstrated need through the Needs Assessment evaluation process. Urban Parks are a subset of community-serving parkland of which there is a deficiency across the county, in particular in many of the urbanizing areas.

Some of the acquisitions currently under consideration would qualify as new pocket parks based on their size (less than two acres) and location (in heavily developed areas). Through recent proffered rezonings, the Park Authority will be acquiring one new pocket park in central Merrifield and one in Tyson's Corner. Recently planned uses at Ossian Hall Park in Annandale and existing improvements at Borge Street Park in Oakton are examples of small parks that have some 'pocket park' characteristics.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 1, 2

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency

FCPA

Status/Plans/Outcomes

Underway

The Park Authority will continue to pursue acquisition in urban areas as funding is made available, and through proffers in the land development process. It is challenging to acquire and develop these types of parks. The high per unit cost of urban land compared with less costly opportunities in other parts of the county makes the choice to acquire land in these areas with limited land acquisition funds difficult. It can also be more expensive to develop these types of parks as the intensity of use requires hard surfacing and concentration of activities.

The Park Authority is actively pursuing acquisition of a new pocket park site in Merrifield in accordance with a recent Area Plan amendment, in addition to opportunities in Tyson's Corner and Bailey's Crossroads. Funding possibilities are currently being explored cooperatively with the Department of Housing and Community Development for purchase of a new pocket park site in north Merrifield.

Resources

Cost: \$1,000,000 for acquisition (funded)

Future Cost: \$10,000,000+ to develop 2-3 of these parks

\$10,000,000 will develop 2 - 3 of these parks in locations to be determined. The Park Authority has limited acquisition funds available from the 2004 Park Bond program, which will be utilized for acquisitions throughout Fairfax County. With the cost of acquiring park land in these urban areas currently ranging from \$0.5 - \$1.0 million per acre, there is no adequate source of funding available. Privately owned pocket parks established as part of the land development process with public access are an alternative way to meet a portion of this need.

EIP07-PT-B-10. Parks and Recreation Needs Assessment Process

Description of Action

A Parks and Recreation Needs Assessment provides the following:

- Determines the area served by individual parks.
- Establishes service areas for park facilities.
- Determines the need for parkland and recreational facilities through a survey process.
- Tracks the inventory of public facilities on a countywide and park by park basis.
- Provides a basis to provide park and recreation facilities in an amount and where needed.
- Balance the needs for particular parks and areas for certain facilities with the availability of those facilities within the county as well as on a local service area basis.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 1, 2, 4, 5

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency

FCPA

Status/Plans/Outcomes

Underway

Implementation of the Needs Assessment is ongoing through the Capital Improvement Program, Comprehensive Plan Amendments, and Long Range Park Planning.

The Needs Assessment should be carried out every 5-7 years in order to capitalize on changes in the County demographics as well as coincide with funding cycles.

Resources

Cost: TBD (Approximately \$300,000 for each revision)

Cost Varies- Study conducted every 5-7 years. Implementation actions included in regular Work Plan. \$300,000 for consultant to conduct Parks and Recreation Needs Assessment in 2000.

The Needs Assessment is the primary tool used by the Planning and Development Division to recognize facility deficiency in the County and is the first step in planning the location of facilities in new or existing parks. The implementation of actions recommended in the Needs Assessment is addressed in EIP07-PT-B-11.

EIP07-PT-B-11. Parks and Recreation Needs Assessment Implementation

Description of Action

The Park Authority has conducted a comprehensive needs assessment to guide park planning and development. The final product of the Park Authority Needs Assessment Project was the development of a 10-Year Needs-Based Capital Improvement Plan. This Plan outlines the cost of meeting the County's park and recreation deficiencies presently and projected through 2013. The CIP has three cost areas: Land Acquisition, New Development, and Renovation, and breaks the timeframe into Near Term, Intermediate Term and Long Term. The Plan is implemented through the annual Capital Improvement Program processes for the agency and funded through Park Bonds, County general funding, revenue streams, donations, and other sources.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 1, 2, 4, 5

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency

FCPA

Status/Plans/Outcomes

Underway

The Park Authority Needs Assessment identified \$111,838,000 needed in the near term and \$377,000,000 needed in next 10 years for land acquisition, facility renovation, and new capital improvements. This does not include funding earmarked specifically for natural or cultural resource protection. A portion of the Near Term Needs will be satisfied through the acquisition and build out of the current and upcoming Capital Improvement Plans. The approved 2004 Park Bond will also meet a portion of the funding need (\$13,250,000 per year for 4 years).

Resources

Cost for new development and renovation: \$53,000,000 has been funded through the 2004 Park Bond (13,250,000 per year for four years)

Future Cost: \$ 33,583,995

\$33,583,995 represents the balance of near term new development and renovation costs (\$86,583,995) minus the \$53,000,000 in the Park Bond (this does not include land acquisition, nor does it include funding earmarked specifically for natural or cultural resource protection). Land Acquisition is addressed in EIP-PT-B-12.

EIP07-PT-B-12. Parkland Acquisition

Description of Action

The Park Authority has an ongoing program for acquisition of vacant and underutilized properties for open space. Parcels identified must be suitable for active recreation uses, natural or cultural resource preservation, or trail connectivity.

Through their program of identification, evaluation and acquisition of property for open space, the Park Authority is currently pursuing up to 40 parcels for various types of open space uses. Among the top priorities are acquisitions for the completion of the Cross County Trail (CCT). Two key properties in the CCT corridor were recently acquired with the transfer of 317 acres from the County to the Park Authority at Laurel Hill. Two other key CCT transactions included an easement purchase and a land exchange last year. See EIP07-PT-B-6 for more information about the CCT.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 1, 2, 3, 4, 5, and 6

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency

FCPA

Status/Plans/Outcomes

Underway

The Park Authority will continue to identify and acquire land suitable for public open space through the variety of methods identified above. This will include active pursuit of: purchases of private land, purchase of trail and conservation easements on occupied land, transfers of open space land from the County and other organizations, dedications of land through the land development process, and donations of land and funding from private entities.

The adopted Land Acquisition Criteria and the Needs Assessment will continue to guide the planning of the land acquisition program where open space is needed most throughout the county. As critical land acquisition decisions arise from unsolicited sources (offers of bargain land sales, targeted properties appear on the market for sale), the Park Authority will evaluate proposals and consider options to alter its current program course to take advantage of such opportunities.

Resources

Cost: \$4,000,000 funded (for three years - \$12,000,000 total)

Future Cost: \$13,254,000

The cost of resources needed to fully accomplish this objective has not yet been identified. However, the Park Authority Needs Assessment identifies a \$25 million near term funding need just for land acquisition (this does not capture land acquisition for protection of natural and

cultural resources or trail development). The 2004 Park Bond includes \$12 million for land acquisition. Thus, there is a need of at least \$13,254,000 for land acquisition.

While some acquisitions are made at no cost to the Park Authority, such as a transfer of County land, the properties that are most important to fill deficiencies in open space countywide must be purchased. With the rapidly dwindling availability of open space in the County, and continually rising cost of land, adequate land acquisition funding is needed for the Park Authority to acquire open space. With the support of the County Executive and the Dept. of Management and Budget, creative financing opportunities can be created which will allow the Park Authority to purchase open space before it is too late.

EIP07-PT-B-13. Open Space Easements/NVCT Partnership

Description of Action

Through the Open Space Easements Program coordinated by the Dept. of Planning and Zoning, donation or purchase of conservation easements has been encouraged for a number of purposes, including open space, historic preservation and trails. The public is encouraged to work with any qualified non-profit land trust, or with the Fairfax County Park Authority or the Northern Virginia Regional Park Authority.

There are several non-profit land trusts that work locally, including the Northern Virginia Conservation Trust (NVCT) and the Potomac Conservancy. The County entered into a public-private partnership with NVCT in FY 2001. Through this partnership, NVCT has obtained 26 conservation easements and four land gifts, protecting over 500 acres in Fairfax County. The Potomac Conservancy seeks easements to protect the Potomac River above the fall line in four states and the District of Columbia, and has six easements in Northern Virginia.

NVCT proactively identifies properties with high natural resource or historical value and promotes donations of easements or fee simple interests in the land. Using the Fairfax County Park Authority's Green Infrastructure Model and the historical landmark listing, the Trust contacts landowners of significant properties and encourages donation of conservation easements or fee simple interest. By using federal and state tax incentives NVCT has been able to facilitate the donation of over \$20 million worth of conservation lands in Fairfax County.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 4, 6

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Lead Agency

DPZ/FCPA/NVCT

Status/Plans/Outcomes

Underway

Resources

Cost: \$258,120 (Approved County Contribution for FY'06)

Future Cost: \$258,120 + CPI (annual cost)

EIP07-PT-B-14. Park Authority Conservation Easement Initiatives

Description of Action

Park Authority conservation easement initiatives for preservation of open space and to facilitate trail connections throughout the County.

The Fairfax County Park Authority (Park Authority) is a leader in conservation and preservation of open space and is dedicated to protecting natural, cultural and historic resources in Fairfax County. Several recent key acquisitions of property and conservation easements by the Park Authority, with assistance from NVCT, include the Ellick Woodland Natural Area Preserve, which protected over 200 acres of rare oak hickory forest from development, and the preservation of Oak Hill, the last remaining residence with a connection to the Fitzhugh family (the Fitzhugh's owned the largest land grant in Fairfax County in the 1700's). The conservation easement placed on this property will preserve the Fitzhugh family house, as well as prevent the 2.6-acre site from development. Among the Park Authority's top priorities is the completion of the Cross County Trail; the Park Authority has used acquisitions of open space, conservation easements and trail easements as mechanisms to complete the CCT.

The Park Authority is currently negotiating a significant conservation easement in the Dranesville District which will protect not only natural resources and provide a needed trail connection, but also protect cultural resources which would be lost if the property is developed. This bargain sale easement was brought to the Park Authority by the NVCT. Due to the nature of the imminent agreement, funds are needed to purchase the conservation easement. This is one example of the opportunities available to the Park Authority to encourage preservation of open space and trail connections.

The Park Authority has developed the Green Infrastructure Model for targeting land acquisition opportunities that have significant natural or cultural resources. The Green Infrastructure Model, along with the recently completed Park Authority Needs Assessment, has provided a blueprint for acquisition of parkland and preservation of open space, significant resources, and trail corridors in the County.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 1, 2, 4, 5

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Park Authority Strategic Plan
Park Authority Policy Manual
Park Authority Natural Resource Management Plan

Lead Agency

FPCA

Continued

Status/Plans/Outcomes

Ongoing

The Park Authority will continue to utilize the Green Infrastructure Model and Needs Assessment tools to cost effectively acquire additional open space, conservation easements and trail connections. Refinement of the Green Infrastructure Model and the implementation of the Agency Natural Resource Management Plan, which lays out strategies to evaluate natural resources on properties prior to acquisition, will allow the Park Authority to make more deliberate and effective decision in regards to open space protection through acquisitions and easements. There are additional costs associated with the Natural Resource Management Plan and Green Infrastructure Model enhancements which are identified under EIP07-PT-16.

With the rapidly dwindling availability of open space in the County, and continually rising cost of land, conservation easements will become a much more heavily relied upon tool for the Park Authority to protect open space.

Resources

Cost: \$12,050,000 unfunded need for staff dedicated to easements and to complete the easement acquisition in the Dranesville District.

EIP07-PT-B-15. Park Authority Natural Resource Management Plan Implementation--Resource Inventories

Description of Action

The Park Authority has developed an Agency-wide Natural Resource Management Plan (NRMP), which was approved by the Park Authority Board in January 2004. The plan outlines strategies, actions and policy changes needed to appropriately plan, develop and manage parkland. The first year implementation of the Natural Resource Management Plan is focused on strategies that do not require additional resources such as reviewing policies and procedures, building partnerships and expanding education. To continue to implement this plan, funding is needed. The second year begins in FY 2006 and will show little progress without additional resources. In addition, in order to adequately manage and develop our parks, the Park Authority continues to stretch limited resources in the areas of acquisition, planning, development and maintenance.

This program aims to develop site specific Natural Resource Management Plans (NRMPs) and to carry out natural resource inventories (NRIs) to keep up with master plan activities and new acquisitions and begin assessments of already owned land. Having information on the resources on parkland as well as management plans will ensure parks are planned and managed appropriately.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 4, 5, 6

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Park Authority Strategic Plan
Park Authority Policy Manual
Park Authority Natural Resource Management Plan

Lead Agency

FCPA

Status/Plans/Outcomes

The second year implementation of the Park Authority Natural Resource Management Plan begins in FY 2006 and will show little progress without additional resources. Currently, NRIs are completed in reaction to proposed development. This program would allow the Park Authority to be proactive in conducting inventories and developing management plans.

- Practicing resource stewardship requires significant resources to collect and analyze data so that FCPA can appropriately plan and manage its parks
- This funding would allow FCPA to make significant progress in conducting natural resource inventories and developing management plans

- This category includes funding to develop site specific NRMPs and to carry out natural resource inventories to keep up with master plan activities and new acquisitions and begin assessments of already owned land.

Resources

Cost of Action (Funded):

Three full time staff and \$650,000 in 2004 Park Bond earmarked for natural resource projects in general (potentially \$162,500 per year for four years). The three full time staff members fill a number of resource management roles and most of their efforts are not focused on implementing the NRMP.

Cost of Resources Needed (Unfunded):

Resource Inventories and Plans: \$370,000 (annual cost) (Total for NRMP \$2,800,000 annually)

While this effort requires dedicated recurring funding and staff position/s to be fully implemented, significant progress can be made with one-time funding.

EIP07-PT-B-16. Park Authority Natural Resource Management Plan Implementation--Geographic Information Systems (GIS)/Resource Data/Green Infrastructure

Description of Action

The Park Authority has developed an Agency-wide Natural Resource Management Plan (NRMP), which was approved by the Park Authority Board in January 2004. The plan outlines strategies, actions and policy changes needed to appropriately plan, develop and manage parkland. The first year implementation of the Natural Resource Management Plan is focused on strategies that do not require additional resources such as reviewing policies and procedures, building partnerships and expanding education. To continue to implement this plan, funding is needed. The second year begins in FY 2006 and will show little progress without additional resources. In addition, in order to adequately manage and develop our parks, the Park Authority continues to stretch limited resources in the areas of acquisition, planning, development and maintenance.

This program will allow more effective natural resource management and data sharing through expansion of geographically linked data. This could include improvements to the green infrastructure model and data and tools for land acquisition, master planning, development and natural resources.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 4, 5, 6

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Park Authority Strategic Plan

Park Authority Policy Manual

Park Authority Natural Resource Management Plan

Lead Agency

FPCA

Status/Plans/Outcomes

The second year implementation of the Park Authority Natural Resource Management Plan begins in FY 2006 and will show little progress without additional resources.

The Park Authority has a need to analyze and communicate resource information to make decisions and communicate decisions about park planning and land acquisition. This program would develop a Decision Support System with tools to manage green infrastructure model, land acquisitions, master planning, development and natural resources as well as develop the data needed for these tools.

Continued

Resources

Cost of Action (Funded)

\$180,000 funded from carryover in support of Board of Supervisors' Environmental Agenda in FY 2005. Three full time staff and \$650,000 in 2004 Park Bond earmarked for natural resource projects in general (potentially \$162,500 per year for four years). The three full time staff members fill a number of resource management roles and most of their efforts are not focused on implementing the NRMP.

Resources Needed (Unfunded)

GIS/Data/Green Infrastructure: \$140,000 (annual cost) (Total for NRMP \$2,800,000 annually)

While this effort requires dedicated recurring funding and staff position/s to be fully implemented, significant progress can be made with one-time funding.

EIP07-PT-B-17. Park Authority Natural Resource Management Plan Implementation--Encroachment Enforcement

Description of Action

The Park Authority has developed an Agency-wide Natural Resource Management Plan (NRMP), which was approved by the Park Authority Board in January 2004. The plan outlines strategies, actions and policy changes needed to appropriately plan, develop and manage parkland. The first year implementation of the Natural Resource Management Plan is focused on strategies that do not require additional resources such as reviewing policies and procedures, building partnerships and expanding education. To continue to implement this plan, funding is needed. The second year begins in FY 2006 and will show little progress without additional resources. In addition, in order to adequately manage and develop our parks, the Park Authority continues to stretch limited resources in the areas of acquisition, planning, development and maintenance.

The Park Authority has tens of thousands of park neighbors and these neighbors can have tremendous impacts on park resources through intentional and unintentional encroachments. This enhanced program will focus on encroachment detection, enforcement and elimination on parkland. A dedicated encroachment team will not only mitigate impacts from current encroachments, but also educate residents on how to be good park neighbors.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 5

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Park Authority Strategic Plan
Park Authority Policy Manual
Park Authority Natural Resource Management Plan

Lead Agency

FPCA

Status/Plans/Outcomes

The second year implementation of the Park Authority Natural Resource Management Plan begins in FY 2006 and will show little progress without additional resources.

Due to not having the focused resources to appropriately manage parkland encroachments there remains significant numbers of encroachments and limited ability to enforce the agency's encroachment policy. This program would allow focused encroachment detection, notification, enforcement and elimination to occur on all parklands with particular emphasis on 'unstaffed' parklands, such as stream valleys and new undeveloped parklands.

EIP07-PT-B-17. Encroachment Enforcement
Continued

Resources

Resources Needed (Unfunded)

Encroachment Enforcement: \$150,000 (annual cost) (Total for NRMP \$2,800,000 annually)

While this effort requires dedicated recurring funding and staff position/s to be fully implemented, significant progress can be made with one-time funding.

EIP07-PT-B-18. Park Authority Natural Resource Management Plan Implementation--Water Resource Protection

Description of Action

The Park Authority has developed an Agency-wide Natural Resource Management Plan (NRMP), which was approved by the Park Authority Board in January 2004. The plan outlines strategies, actions and policy changes needed to appropriately plan, develop and manage parkland. The first year implementation of the Natural Resource Management Plan is focused on strategies that do not require additional resources such as reviewing policies and procedures, building partnerships and expanding education. To continue to implement this plan, funding is needed. The second year begins in FY 2006 and will show little progress without additional resources. In addition, in order to adequately manage and develop our parks, the Park Authority continues to stretch limited resources in the areas of acquisition, planning, development and maintenance.

This program would allow us to conduct small stream improvement projects in our most degraded stream valleys as well as to employ Low Impact Development techniques in our park development projects. This initiative will allow us to restore some of our degraded stream valleys while reaching out to the public and partners on this important resource issue. In addition, the Park Authority should be a leader and set an example in protecting our watersheds through aggressive and innovative stormwater management practices.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 5

Growth & Land Use 5

Water Quality 1, 3, 7, 8

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan

Park Authority Strategic Plan

Park Authority Policy Manual

Park Authority Natural Resource Management Plan

Lead Agency

FCPA

Status/Plans/Outcomes

The second year implementation of the Park Authority Natural Resource Management Plan begins in FY 2006 and will show little progress without additional resources.

Water resource issues are one of the largest natural resources issues affecting parkland. The Park Authority does not have a dedicated expert in water resources to address these issues on a full time basis. With DPWES implementing an aggressive watershed management program, the demand for Park Authority staff time is even greater. This program consists of a dedicated staff member

(Ecologist II (S24)) to manage stream valley restoration projects, all water resource related projects and to coordinate watershed planning with DPWES. Additional funding for stream valley restoration projects is included in 2008 and beyond (this funding is additional to the bond funding). The Park Authority must balance the needs for cost effective development with best practices which protect water resources. This category is also to fund the additional cost of utilizing beyond best management practices in development activities. An example might be utilizing innovative stormwater management practices rather than requesting a stormwater management waiver.

Resources

Estimated Annual Cost (Funded)

\$150,000 funded with carryover in support of Board of Supervisors' Environmental Agenda in FY 2005.

Resources Needed (Unfunded)

Water Resource Protection: \$1,000,000 (annual cost) (Total for NRMP \$2,800,000 annually)

While this effort requires dedicated recurring funding and staff position/s to be fully implemented, significant progress can be made with one-time funding.

EIP07-PT-B-19. Park Authority Natural Resource Management Plan Implementation--Education

Description of Action

The Park Authority has developed an Agency-wide Natural Resource Management Plan (NRMP), which was approved by the Park Authority Board in January 2004. The plan outlines strategies, actions and policy changes needed to appropriately plan, develop and manage parkland. The first year implementation of the Natural Resource Management Plan is focused on strategies that do not require additional resources such as reviewing policies and procedures, building partnerships and expanding education. To continue to implement this plan, funding is needed. The second year begins in FY 2006 and will show little progress without additional resources. In addition, in order to adequately manage and develop our parks, the Park Authority continues to stretch limited resources in the areas of acquisition, planning, development and maintenance.

This program is an education and outreach initiative to develop and communicate stewardship messages and reach out to partners and citizens across the county on stewardship issues. A dedicated stewardship education program is essential to fostering good stewardship in staff and citizens and it is also an opportunity to communicate our success as good stewards. This program will allow the Park Authority to educate both staff and citizens countywide in important stewardship issues and the County's commitment to stewardship and to engage them in practicing good stewardship.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 5
Environmental Stewardship 1, 2, 3, 4

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Park Authority Strategic Plan
Park Authority Policy Manual
Park Authority Natural Resource Management Plan

Lead Agency

FPCA

Status/Plans/Outcomes

The second year implementation of the Park Authority Natural Resource Management Plan begins in FY 2006 and will show little progress without additional resources.

The Park Authority is implementing a number of stewardship education projects with countywide impacts with existing staff resources. This program would provide support dedicated to coordinate activities that educate both staff and residents countywide in important stewardship issues. Also included is funding for outreach materials. These initiatives aim to

EIP07-PT-B-19. FCPA Natural Resource Management Plan Implementation--Education
Continued

reinforce the county's commitment to stewardship and to engage employees and residents in practicing good stewardship.

Resources

\$135,000 funded with carryover in support of Board of Supervisors' Environmental Agenda in FY 2005.

Resources Needed (Unfunded)

\$300,000 (annual cost) (Total for NRMP \$2,800,000 annually)

While this effort requires dedicated recurring funding and staff position/s to be fully implemented, significant progress can be made with one-time funding.

EIP07-PT-C-1. Analysis of Developed/Undeveloped Land Within the Park Authority Park System

Description of Action

Using GIS analysis as well as site visits, staff will identify and quantify the amount of developed versus undeveloped land within parkland while also identifying different types of developed and undeveloped land uses.

By identifying the amount and type of developed and undeveloped land within the Park Authority system, the Park Authority can better plan and manage these different lands. Undeveloped land would then be further categorized to delineate which undeveloped lands are natural areas. This would include classifying the type of natural resources (such as meadow, forest, stream, wetland, etc). Once a GIS analysis system is devised and baseline studies have been completed, this study could be updated periodically in order to maintain a current record of land types within the system.

The Park Authority must provide opportunities for recreation and also be stewards of natural resources. By developing a system to define and identify developed and undeveloped land within the Park Authority's land holdings, we can better plan future acquisition and land management needs.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 1, 2, 5

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Park Authority Strategic Plan
Park Authority Policy Manual
Park Authority Natural Resource Management Plan

Lead Agency

FCPA

Status/Plans/Outcomes

This is a new initiative. By developing a system to define and identify developed and undeveloped land within the Park Authority's land holdings, FCPA can better plan future acquisition and land management needs.

Resources

Cost of Resources Needed (Unfunded)
\$300,000

EIP07-PT-C-2. Park Authority Natural Resource Management Plan Implementation--Invasive Plant Control

Description of Action

The Park Authority has developed an Agency-wide Natural Resource Management Plan (NRMP), which was approved by the Park Authority Board in January 2004. The plan outlines strategies, actions and policy changes needed to appropriately plan, develop and manage parkland. The first year implementation of the Natural Resource Management Plan is focused on strategies that do not require additional resources such as reviewing policies and procedures, building partnerships and expanding education. To continue to implement this plan, funding is needed. The second year begins in FY 2006 and will show little progress without additional resources. In addition, in order to adequately manage and develop our parks, the Park Authority continues to stretch limited resources in the areas of acquisition, planning, development and maintenance.

Invasive exotic plants are expanding their foothold within parkland, causing severe degradation of native ecological systems. This program will include an evaluation of the scope of the problem, prioritization of control efforts and invasives removal on parklands. This program would not only have an immediate impact of restoring native communities, but would also provide education and outreach benefits countywide.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 5

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Park Authority Strategic Plan
Park Authority Policy Manual
Park Authority Natural Resource Management Plan

Lead Agency

FCPA

Status/Plans/Outcomes

The second year implementation of the Park Authority Natural Resource Management Plan begins in FY 2006 and will show little progress without additional resources.

Invasive non-native plants are pervasive in the over 23,000 acres of Fairfax County Park Authority parkland and across the county. These plants cause severe degradation of native plant communities and ecological systems. An aggressive well staffed program is needed to begin to address this problem.

Resources

Resources Needed (Unfunded)
Invasive Plant Control: \$240,000 (annual cost) (Total for NRMP \$2,800,000 annually)

While this effort requires dedicated recurring funding and staff position/s to be fully implemented, significant progress can be made with one-time funding.

EIP07-PT-C-3. Park Authority Natural Resource Management Plan Implementation--Boundary Survey and Marking

Description of Action

The Park Authority has developed an Agency-wide Natural Resource Management Plan (NRMP), which was approved by the Park Authority Board in January 2004. The plan outlines strategies, actions and policy changes needed to appropriately plan, develop and manage parkland. The first year implementation of the Natural Resource Management Plan is focused on strategies that do not require additional resources such as reviewing policies and procedures, building partnerships and expanding education. To continue to implement this plan, funding is needed. The second year begins in FY 2006 and will show little progress without additional resources. In addition, in order to adequately manage and develop our parks, the Park Authority continues to stretch limited resources in the areas of acquisition, planning, development and maintenance.

The Park Authority has more than 23,000 acres of land, most of which is not marked at its boundaries. As a result, boundaries are not clear and park neighbors can have tremendous impacts on park resources through unintended encroachments.

This program would survey and permanently mark park boundaries in order to make park property lines clear and discourage encroachments and their negative impacts.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 5

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Park Authority Strategic Plan
Park Authority Policy Manual
Park Authority Natural Resource Management Plan

Lead Agency

FCPA

Status/Plans/Outcomes

The second year implementation of the Park Authority Natural Resource Management Plan begins in FY 2006 and will show little progress without additional resources.

The majority of parkland boundaries are not marked. The continued lack survey and boundary marking allows undesired use of park land such as dumping, encroachments and poor land use practices such as off road biking, hunting and natural/cultural resource degradation. This program includes staff to conduct boundary surveying and marking with supplemental survey work by contract.

EIP07-PT-C-3. FCPA Boundary Survey and Marking
Continued

Resources

Cost of Resources Needed (Unfunded)

Boundary Survey and Marking: \$220,000 (annual cost) (Total for NRMP \$2,800,000 annually)

While this effort requires dedicated recurring funding and staff position/s to be fully implemented, significant progress can be made with one-time funding.

DRAFT -- July 1, 2005

EIP07-PT-C-4. Park Authority Natural Resource Management Plan Implementation--Stewardship Maintenance

Description of Action

The Park Authority has developed an Agency-wide Natural Resource Management Plan (NRMP), which was approved by the Park Authority Board in January 2004. The plan outlines strategies, actions and policy changes needed to appropriately plan, develop and manage parkland. The first year implementation of the Natural Resource Management Plan is focused on strategies that do not require additional resources such as reviewing policies and procedures, building partnerships and expanding education. To continue to implement this plan, funding is needed. The second year begins in FY 2006 and will show little progress without additional resources. In addition, in order to adequately manage and develop our parks, the Park Authority continues to stretch limited resources in the areas of acquisition, planning, development and maintenance.

The Park Authority has the responsibility to preserve, protect and manage over 23,000 acres of parkland, much of which is in the 'undeveloped' or 'natural' category. This program would allow the Park Authority to better manage these land resources with a resource maintenance toolbox including mowing, habitat management, native plantings, stream valley stabilization, forest treatments, debris/trash removal, beaver and beaver conflict management and maintaining stormwater control devices. This program will aid in the proper management and maintenance of natural resources on parkland. It will also allow the Park Authority to better take advantage of existing and expand partnerships with volunteers and park supporters.

Environmental Agenda Objectives Supported:

Parks Trails, and Open Space 5

Other Plans or Documents where this action appears or that it supports:

Comprehensive Plan
Park Authority Strategic Plan
Park Authority Policy Manual
Park Authority Natural Resource Management Plan

Lead Agency

FCPA

Status/Plans/Outcomes

The second year implementation of the Park Authority Natural Resource Management Plan begins in FY 2006 and will show little progress without additional resources.

This program will provide a dedicated natural resource maintenance staff unit to perform stewardship maintenance activities on parklands, ensuring that natural resources are protected. There is a significant need to actively manage the land resources by way of resource

EIP07-PT-C-4. FCPA Stewardship Maintenance

Continued

maintenance such as debris removal, habitat management, stream valley stabilization, drainage issues and wildlife conflict. The Natural Resource Management and Protection Section currently consists of a three-person staff that is responsible for many different tasks and is unable to dedicate enough time to these needs; nor does Park Operations have adequate staff available to implement this program.

Resources

Stewardship Maintenance: \$400,000 (annual cost) (Total for NRMP \$2,800,000 annually)

While this effort requires dedicated recurring funding and staff position/s to be fully implemented, significant progress can be made with one-time funding.

EIP07-ES-A-1. World Water Monitoring Day

Description of Action

World Water Monitoring Day is hosted by the America's Clean Water Foundation. In partnership with the Environmental Protection Agency, Northern Virginia Soil and Water Conservation District, Earth Sangha, National Zoo, and Chesapeake Bay Foundation, a day-long festival took place on October 18, 2004. The event included puppet shows, exhibits, crab races, stream monitoring demonstrations, and much more. There were 30 participants in this effort.

Environmental Agenda Objectives Supported:

Environmental Stewardship 1, 2
Water Quality 1, 7, 8, and 10

Other Plans or Documents where this action appears or that it supports:

Watershed Management Plans

Lead Agency:

Department of Public Works and Environmental Services
NVSWCD

Status/Plans/Outcomes

The 2004 event was successful and Fairfax County would support future events of this nature to raise awareness and partnership in improvement of the overall quality of water in the region. NVSWCD supported the program financially in the amount of \$1000.00.

Resources

If future events are held, the Stormwater Business Area could support the event through its partnership project within the overall business area budget.

EIP07-ES-A-2. Master Watershed Stewardship Certification Program

Description of Action

The Stormwater Planning Division (SWPD) and the NVSWCD were grant partners with the Potomac River Greenways Coalition for their Master Watershed Stewardship Certification Program. A component of the grant was to increase the technical and organizational capacity of at least ten existing and new community watershed organizations. An overwhelming 60 people "graduated" from the program after attending at least six out of eight informational sessions on watershed assessment, monitoring, and stewardship opportunities, in addition to volunteering 25 hours towards watershed improvement projects, including cleaning up stream valleys, monitoring streams, implementing Low Impact Development practices, restoring stream banks, and others.

Environmental Agenda Objectives Supported:

Environmental Stewardship 1, 2, 4
Water Quality 1, and 3

Other Plans or Documents where this action appears or that it supports:

Watershed Management Plans

Lead Agency

Department of Public Works and Environmental Services
Northern Virginia Soil and Water Conservation District

Status/Plans/Outcomes

Completed. SWPD is collaborating with the Northern Virginia Soil and Water Conservation District to develop follow-up programs for the "graduates" of the initial certification program.

Resources

Follow-up programs may be considered that would require extensive staff time and funding to be determined at a later date, depending on the program structure.

EIP07-ES-B-1. Global Rivers Environmental Education Network (GREEN) Program—Earth Force

Description of Action

The Department of Public Works and Environmental Services serves as a technical resource for Earth Force's Global Rivers Environmental Education Network (GREEN) program.

Responsibilities include identifying stream monitoring sites, assisting with outdoor training exercises, developing presentations, and presenting to students and teachers in a classroom setting. Earth Force engages young people as active citizens who improve the environment and their communities now and in the future.

GREEN builds on national academic standards and teaches elementary, middle and high school-aged youth essential skills including critical thinking, teamwork, problem solving and the application of science to real world problems. Using proven scientific methods, GREEN teaches young people to assess the quality of their local water, using water monitoring equipment and conducting classroom research to understand the health of their watershed.

Environmental Agenda Objectives Supported:

Environmental Stewardship 1, 2
Water Quality 1, 3, 7, and 8

Other Plans or Documents where this action appears or that it supports:

Watershed Management Plans

Lead Agency

Department of Public Works and Environmental Services

Status/Plans/Outcomes

This is an on-going program. DPWES will continue to provide technical support when necessary to Earth Force. To date there have 25 participants, in the future that number is expected to increase.

Resources

Staff time is provided to support this effort, within the Division of Stormwater Planning. No additional funding needed for current effort.

EIP07-ES-B-2. Volunteer Stream Monitoring Program

Description of Action

The Northern Virginia Soil and Water Conservation District (NVSWCD) sponsors a volunteer stream monitoring program. The program provides training, certification, equipment, on-going support, data processing and quality control. Volunteer conduct biological monitoring to determine the general health of a stream, based on the composition and diversity of benthic macroinvertebrates. They also conduct chemical tests for turbidity and nitrate/nitrite and make observations about the stream physical conditions and surrounding habitat. Approximately 165 certified monitors collect data four times a year at 53 sites throughout the county. The volunteer data complements the data that was collected for the SPS Study and provides on-going water quality trend data. It also identifies emerging problems. The Audubon Naturalist Society (ANS) also trains and supports volunteer stream monitors, with about six sites located in the county.

In addition to learning about stream monitoring, many volunteers also become involved in watershed groups, clean-up events, and educational programs. Newsletters and monthly calendars about watershed events are sent by email to 700 people who are interested in stream monitoring and related issues, many of whom forward the emails to others. Programs also are conducted in elementary, middle and high schools, which include stream monitoring training and educational programs about watershed issues. Annually, this includes 8 to 10 high schools.

The volunteer data collected serves as important information for determining water quality trends in the county's streams. Volunteer data, along with the probabilistic stream monitoring data collected through DPWES-SWPD and other various monitoring programs, will be incorporated into an annual report (beginning in 2005) allowing for a comprehensive view of the conditions of Fairfax County's streams.

Environmental Agenda Objectives Supported:

Environmental Stewardship 1, 2, 3 and 4
Water Quality 1 and 10

Other Plans or Documents where this action appears or that it supports:

Watershed Management Plans
New Millennium Occoquan Watershed Task Force Report

Lead Agency

Northern Virginia Soil and Water Conservation District
Department of Public Works and Environmental Services

Status/Plans/Outcomes

This is an on-going effort of the Northern Virginia Soil and Water Conservation District. Fairfax County will continue to support the efforts of volunteers in support of the program and for the protection of water quality within the county.

Resources

NVSWCD's watershed specialist coordinates the volunteer stream monitoring program and related education and outreach activities. These activities are valued at \$40,000 annually and are funded as part of the NVSWCD annual contribution.

EIP07-ES-B-3. FCPA Stream Monitoring and Restoration Outreach Activities

Description of Action

Park Authority staff monitors streams in several parks. Staff and an intern conduct the annual Rapid Bio-Assessment II at Huntley Meadows Park. Through the Huntley's school programs, staff members demonstrate water testing for 5th and 6th graders and involve high school students in water testing. At Riverbend and Ellanor C. Lawrence parks, paid staff and volunteers, including students, monitor streams. These macroinvertebrate data are shared with the Northern Virginia Soil & Water Conservation District (NVSWCD). Stream restoration along the Potomac River is supervised by Riverbend staff working with Eagle Scouts and McLean High School students. For summer 2005, Ellanor C. Lawrence staff is planning to incorporate stream monitoring into three nature day camps offered for children. Working with Hidden Oaks Nature Center, Woodson High School's Science Honor Society members have been trained by NVSWCD and, on a quarterly basis, monitor streams in three parks.

Environmental Agenda Objectives Supported:

Environmental Stewardship 1, 2

Other Plans or Documents where this action appears or that it supports:

Park Authority Strategic Plan

Park Authority Policy Manual

Park Authority Natural Resource Management Plan

Lead Agency

FCPA

Status/Plans/Outcomes

Underway

Staffs at Ellanor C. Lawrence Park and Huntley Meadows are expanding student involvement in stream monitoring by adding stream observation and testing activities to summer camps and incorporating stream testing demonstration into school programs. Based on the feedback from the participants, these activities could be expanded to the environmental education menu at other sites

Resources

Estimated Annual Cost of Action (Funded)

Costs include staff time (paid and volunteer) and equipment.

Cost of Resources Needed to Accomplish Future Plans (Unfunded)

To be determined.

EIP07-ES-B-4. Watershed Management Community Advisory Committees

Description of Action

As part of the Public Involvement component of the countywide Watershed Planning effort, a Community Advisory Committee (CAC) for each plan is formed to assist in throughout the plan's development. The committees are diverse groups of community stakeholders with representatives from various special interest groups, including homeowners associations, business, environmental groups, developers, churches, schools, etc.

Fifteen plans will be developed; therefore, fifteen representative community-based committees will be formed. In addition, it is anticipated that community –based committees will continue to function to provide continuing insight and to build community support for project implementation. Under consideration is the establishment of a county-wide committee for the evaluation of policy recommendations developed during the Watershed Planning process.

Environmental Agenda Objectives Supported:

Environmental Stewardship 1, 2, 4
Water Quality 3

Other Plans or Documents where this action appears or that it supports:

Watershed Management Plans

Lead Agency

Department of Public Works and Environmental Services

Status/Plans/Outcomes

In the long-term, these fifteen all volunteer committees may be closely networked to monitor the implementation of the watershed plans. To date there have been over 180 participants in this effort. A county-wide committee may be established to work on policy initiatives developed during the planning process.

Resources

These costs have been included in EIP07-WQ-B-1.

EIP07-ES-B-5. Semi-Annual Watershed Cleanups

Description of Action

Stormwater Planning Division staff in partnership with numerous other local agencies support the ongoing efforts to improve the aesthetics and health of Fairfax County's waterways by participating in semi-annual watershed cleanups. Large-scale events occur in April, through the Alice Ferguson Foundation's Potomac Watershed Cleanup and in September, through the International Coastal Cleanup. Staff assists in coordination of these events in Fairfax County.

Environmental Agenda Objectives Supported:

Environmental Stewardship 1, 2, 4
Water Quality 3 and 8

Other Plans or Documents where this action appears or that it supports:

Watershed Management Plans

Lead Agency

Department of Public Works and Environmental Services

Status/Plans/Outcomes

Staff recognizes the value of these volunteer cleanups as stewardship opportunities and ways of improving community awareness of their community's stream. Staff will continue to support these cleanups.

There have been approximately 600 participants in this program countywide.

Resources

No additional funding needed for current efforts. Estimated DPWES staff time in past annual efforts totals approximately \$2,000. Staff support is included in the current Stormwater Business Area budget.

EIP07-ES-B-6. Fairfax Watershed Network

The Fairfax Watershed Network is a dedicated group of organizations, agencies and individuals that support and promote the improvement and protection of Fairfax County's streams and watersheds through outreach and education efforts. It is the mission of this group to protect and improve Fairfax County's streams and watersheds through collaborative outreach and education efforts. DPWES Stormwater Planning Division and NVSWCD are founding members of this group and continue to serve as members and technical liaison.

Environmental Agenda Objectives Supported:

Environmental Stewardship 1, 2, 4
Water Quality 3, 10

Other Plans or Documents where this action appears or that it supports:

Watershed Management Plans
New Millennium Occoquan Task Force

Lead Agency

Department of Public Works and Environmental Services
Northern Virginia Soil and Water Conservation District
Audubon Naturalist Society
Friends Of Groups

Status/Plans/Outcomes

DPWES and NVSWCD staff will continue to support the Network's efforts.

Resources

Staff resources to support this program are budgeted in the Stormwater Business Area program plan. NVSWCD staff support time is a budgeted item in its annual plan of work.

EIP07-ES-B-7. Encourage Citizen-Based Watershed Stewardship

Description of Action

Since 1990, the Park Authority has sponsored the biannual Watershed Clean-Up Day, as an opportunity for Fairfax County residents to discover the dynamics of county streams and watersheds and to provide a hands-on experience for them to care for their water resources. Involvement varies from less than 20 people or more than 300. Participants include scouts, families, church groups, middle school students and civic associations. During the program participants find their watershed address (finding their street on the county watershed map), learn they are part of the Chesapeake Bay Watershed (finding Fairfax County on a satellite image of the Bay's watershed) and discover how water moves in a watershed. As they remove debris from the stream they learn that most of it originated elsewhere. It was carried from yards and roadways to storm drains and eventually into the stream. Everyone was astounded when 5,060 pounds of debris was collected from four streamside locations.

Environmental Agenda Objectives Supported:

Environmental Stewardship 1, 2, 4

Other Plans or Documents where this action appears or that it supports:

Park Authority Strategic Plan

Park Authority Policy Manual

Park Authority Natural Resource Management Plan

Lead Agency

FPCA

Status/Plans/Outcomes

Underway

- Consider new or additional Watershed Clean-Up Day locations. This could be accomplished by determining streams that need cleaning or a location that could involve new participants
- Enlist additional program partners. This may include increased involvement by schools with access to streams.
- Increase the hands-on watershed education activities. An outstanding teaching tool for demonstrating the complexity and importance of water quality practices is the EnviroScape, a watershed model. Staff would like to purchase watershed models, for four sites that conduct Watershed Clean-up Day and present environmental education programs for school groups on a daily basis. These sites include Hidden Oaks Nature Center in Annandale, Hidden Pond Nature Center in Springfield, Ellanor C. Lawrence Park in Chantilly and Riverbend Park in Great Falls.

Resources

Estimated Annual Cost of Action (Funded)

- Paid and volunteer staff time
- Program planning/promotion, watershed education, safety instruction, assignments:
Resource Management Division

EIP07-ES-B-7. Encourage citizen-based watershed stewardship

Continued

- Haul debris from site: Park Operations Division
- Promotion: FCPA's quarterly magazine Parktakes
- Fees: tipping fees at the landfill

Cost of Resources Needed to Accomplish Future Plans (Unfunded) \$4,000

The Enviroscope has been a successful teaching tool used by staff at Huntley Meadows Park and the Northern Virginia Soil and Water Conservation District for demonstrating to children and adults how a watershed functions and that water pollution comes from many sources.

EIP07-ES-B-8. Involve Children in Projects that Respect, Protect and Enhance the Environment

Description of Action

Fairfax County Public Schools (FCPS) and the Fairfax County Park Authority (FCPA) staff members collaborate to ensure that the hundreds of education programs presented in parks each year meet the needs of teachers and students and fulfill the state's Standards of Learning and the county's Program of Studies. Together, these agencies have built a strong foundation for students to understand and respect the county's natural resources.

For many years students have been engaged in environmental protection in parks. Environmental stewardship is enhanced by individual students who serve as active park volunteers, conduct park projects to fulfill community service requirements (usually 15-20 hours) and through class projects. Examples of this involvement include Woodson High School's Science Honor Society's quarterly stream monitoring in three parks and McLean High School's stream valley restoration at Scotts Run.

Environmental Agenda Objectives Supported:

Environmental Stewardship 3

Other Plans or Documents where this action appears or that it supports:

Park Authority Strategic Plan

Park Authority Policy Manual

Park Authority Natural Resource Management Plan

Lead Agency

FCPS, FCPA

Status/Plans/Outcomes

Ongoing

Fairfax County Public Schools and the Fairfax County Park Authority plan to continue working together to involve students in projects that respect, protect and enhance the environment.

Resources

To be determined.

EIP07-ES-B-9. FCPA “Adoption” Program for Natural Areas Such as Parks, Trails and Stream Valleys.

Description of Action

Currently there are 22 participants in the Park Authority's Adopt-A-Park program. This program, administered by the agency's Park Operations Division, encourages citizens to adopt trails, small parks and playgrounds. Most 'adopters' are homeowner associations or churches located close to the park and typically the organization's members are frequent users of the selected park. The Park Authority and organization sign an agreement that outlines the scope of what will be done in the park. Another existing adoption model is Woodson High School's Science Honor Society's stream monitoring. Although the students may change each year, the advisor has adopted this ongoing natural resource management project. For four years he has provided continuity and oversight for stream monitoring in three parks. Park Authority staff communicates with him to recognize these valuable efforts, discuss progress and ensure that new students receive the required training to become certified monitors.

Environmental Agenda Objectives Supported:

Environmental Stewardship 1, 2, 3, 4

Other Plans or Documents where this action appears or that it supports:

Park Authority Strategic Plan
Park Authority Policy Manual
Park Authority Natural Resource Management Plan

Lead Agency

FCPA

Status/Plans/Outcomes

Ongoing

The Park Authority will explore how to best develop a comprehensive program for adoption of natural areas. One limitation foreseen is insufficient staff to manage the groups, especially staff with natural resource expertise. This program would be implemented by our Park Operations and Resource Management Divisions.

One way to engage young citizens in stewardship of natural areas may be to develop agreements with teachers, instructors and professors (of biology, natural sciences, etc.) from local high schools and colleges to 'adopt' natural resource management projects. This would offer their students a practical, hands-on use of what has been learned in the classroom while the students provide a valuable community service. Other plans must be developed and considered.

Resources

Costs to implement this program will be developed in the future.

EIP07-ES-B-10. Storm Drain Marking-Pollution Prevention Program

Description of Action

NVSWCD sponsors a storm drain marking program, which is a neighborhood education program about the dangers of dumping pollutants into storm drains, which lead to nearby streams. The emphasis of the program is educating the community about how to properly dispose of used motor oil, fertilizer, pet waste, toxic chemicals, yard debris, trash and other pollutants. This is done by volunteers who create and distribute brochures and door hangars, and place articles in their community newsletters. Guidance is provided to ensure accurate information is provided. NVSWCD coordinates with VDOT for the necessary permits and ensures that the storm drain markers, or stencils, are applied according to the standards and guidelines in the NVSWCD *Storm Drain Stenciling Guide*. Schools, community organizations, other agencies and watershed stewardship groups often are partners in implementing this program.

Environmental Agenda Objectives Supported:

Environmental Stewardship 1, 2, 3 and 4
Water Quality 1 and 10

Other Plans or Documents where this action appears or that it supports:

Watershed Management Plans
New Millennium Occoquan Watershed Task Force Report

Lead Agency

Northern Virginia Soil and Water Conservation District
Department of Public Works and Environmental Services

Status/Plans/Outcomes

This is an on-going effort of the North Virginia Soil and Water Conservation District. An average of five to 10 projects is carried out in communities annually, resulting in 2,000 to 8,000 households educated by their neighbors.

Fairfax County will continue to support the efforts of volunteers in support of the program and for the protection of water quality within the county.

Resources

NVSWCD staff time budgeted as part of its Annual Plan of Work. The greatest cost in this program is for oval, customized (name of watershed) stickers that are glued onto storm drains. They cost approximately \$4.00 each. Sometimes this can be funded by a grant, but not always. Consideration is being given to funding this cost as part of implementing the public outreach aspect of a watershed plan implementation.

EIP07-ES-B-11. Education and Outreach

Description of Action

The Northern Virginia Soil and Water Conservation District sponsors a variety of programs and activities that help to inform the public about watershed issues and provides tools for them to help protect streams and other natural resources. Some examples are:

- *You and Your Land—A Homeowner's Guide for the Potomac Watershed*. This handbook has a variety of practical information designed to aid homeowners in the economical care and maintenance of their property. It provides a simple step-by-step approach to solving common problems found in most yards, gardens or common areas. It is available on the county web site at <http://www.fairfaxcounty.gov/nvswcd/youyourland/intro.htm>
- Education resource materials, watershed awareness programs (watershed basics), and an interactive watershed model—*Enviroscape*—are part of the outreach program targeted to teachers, youth groups and community groups. Students also receive help with science projects.
- *Envirothon* is a local, state and national competition among teams of high school students. Hands-on events give them an opportunity to demonstrate their knowledge about aquatics, forestry, soils, wildlife. Each year there is a special topic, such as watershed planning, urban runoff, agricultural pollution, a leaking landfill.
- The NVSWCD web page on the county's web site contains a broad array of educational and technical information on environmental topics. It averages 6,000 visitors a month. www.fairfaxcounty.gov/nvswcd
- *Conservation Currents* is a quarterly newsletter with articles homeowner associations are encouraged to reprint. The variety of articles includes information about ponds, streams, stormwater management, hazardous waste, disposing of pet waste, proper lawn and garden fertilization, low impact development, erosion and sediment controls on construction sites, and citizen stewardship activities.
- Community groups are encouraged to Adopt-A-Stream and enroll in the state program. They receive a sign with the program logo and their name, which they can post at a road crossing to help raise awareness about keeping trash out of streams.
- Town meetings and other community events provide an opportunity to take a display and literature and talk with the public. Fifteen new panels have been created to offer information about specific subject areas, e.g., riparian planting, rain gardens, responsible yard care, drainage problems, soils, and stormwater.
- Watershed stewardship (Friends of) groups receive administrative, educational and technical support, with the message that neither government nor citizens can solve watershed problems alone, but must work together.
- Programs and workshops are provided to the community, e.g., watershed walks, workshops on sediments and nutrients in streams, how to spot problems with erosion and sediment controls on construction sites, how to solve drainage problems, pond management, stream stabilization projects, and infiltration techniques such as rain gardens.
- The *Watershed Stewardship Guide*, available both in print and on the web, shows citizens ways they 'can make a difference.'

EIP07-ES-B-11. Education and Outreach

Continued

- The annual seedling program raises awareness about the benefits of trees and other native vegetation and contributes to urban reforestation.
- Staff provide technical assistance to homeowner associations and schools to design and implement projects that both educate and solve problems, e.g. a rain garden, removal of invasive plants.

All programs are supported by the county and many of the programs are carried out in partnership with county agencies, other agencies, and environmental groups,

Environmental Agenda Objectives Supported:

Environmental Stewardship 1, 2, 3 and 4
Water Quality 1 and 10

Other Plans or Documents where this action appears or that it supports:

Watershed Management Plans
New Millennium Occoquan Watershed Task Force Report

Lead Agency

Northern Virginia Soil and Water Conservation District (in partnership with many county agencies and community organizations)

Status/Plans/Outcomes

These programs will continue, with a view toward expanding hands-on education and projects with citizen groups.

Resources

These programs are budgeted and carried out as part of the NVSWCD annual plan of work.